

A 99 Media
Publication

digit

COMPARE
KIDS
TABLETS

LEARN
VR HEADSETS
TODAY

REVAMP
YOUR
CV

YOUR TECHNOLOGY NAVIGATOR | WWW.DIGIT.IN | VOL.15 ISSUE 04

the appsutra

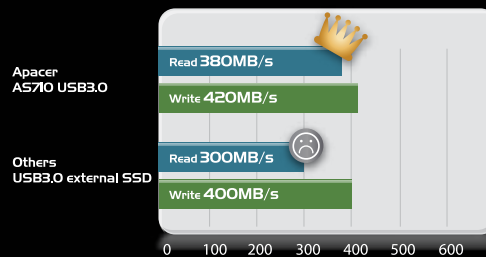
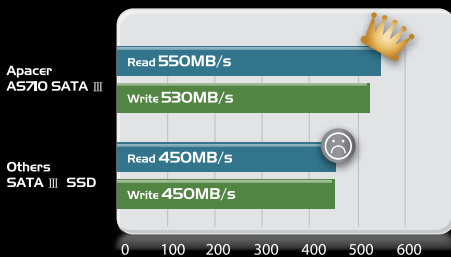
THE DEFINITIVE
GUIDE TO ACHIEVE
ULTIMATE
APPGASM





USB3.0 Legend-
a speedy and Fashionable Lifestyle

AS710 SATAIII USB3.0 Portable SSD



For more Details Contact _____
Shivaraj Neelangi / Mobile: +91 9900508823 / E-mail: shivaraj_neelangi@apacer.com
<< Looking for distributors across India >>

Apacer

Yawwwwn!

A known cynic once said to me, “At the bottom of it all, people are there for your entertainment.” As disconcerting an idea as it seemingly was, I gave it some thought before rejecting it entirely. “Think about it,” this person said, “the moment a friend stops being entertaining – maybe he got married, got an all-consuming job or just plain stopped being interesting enough – you unconsciously start distancing yourself from him. You’ll find yourself meeting up less frequently and eventually that out-of-sight, out-of-mind thing happens”.

If this theory is true, I suppose it could extend to other aspects of life as well, even technology. Our very existence, especially now, when base needs are taken care of, could be one big quest to stave off boredom. Think about the times you’ve turned to your phone while waiting in line, on your daily commute to work, sitting in a coffee shop, or warming the park bench waiting for your friend to turn up. God forbid, you have a moment’s idle time! It’s just not acceptable, no sir. There’s candy to be crushed, tweets to be read and gags to be loll at.

It’s amazing the amount of tech that’s created day in and day out, with the sole purpose of banishing boredom. Just take a look at our cover story – the humongous appstravaganza we’ve got in store for you this issue – for proof. While in the process of deciding what way to slice and dice these apps for you, we realised many could be simply be grouped under the overarching umbrella of “entertainment”, in other words, boredom killers.

Some people believe that there’s no excuse for boredom. With so much technology around you to keep you engaged, being bored just seems like an impossibility. I, for one, haven’t been bored ever since I got my hands on a proper smartphone. Because of so much technology all around us – smartphones, kindles, smartwatches, tablets – our mind rarely gets any idle time to just space out.

Is boredom such a plague to be avoided at all costs? An idle mind may be the devil’s workshop, but as it turns out the devil comes up with the most wickedly creative ideas. On doing a bit of digging, I found a nice podcast by New Tech City that makes a case for boredom. There’s apparently plenty of evidence to

suggest that boredom may actually be good for you. An emerging research subject called “Mind Wandering” is based on this very hypothesis. When we’re not preoccupied by attention-demanding tasks, we tend to go into a trance-like state, where we become less aware of our surroundings. Ever notice how people in a reverie get “shaken” back to reality when they’re staring into space and you happen to creep up on them? Neuroscientists have found a close link between creativity and this state we enter into when our minds are idle. A very interesting experiment conducted by Dr. Sandi Mann from the University of Central Lancashire tries to prove this. In the experiment, she bored her subjects to death (well, not literally) and then asked them to come up with creative uses for two paper cups. The most interesting ideas came from the bored subjects rather than a control group who were asked to straight away come up with ideas.

Surprising right? One would assume that constantly active (and therefore considered sharp) minds come up with the best ideas.

Now before you start sharpening your pitchforks, understand that this isn’t one of those “tech is a big, bad monster” rants. Nor am I in any way advocating a “disconnect” drive or asking you to turn into a dreadlock-sporting hippie. Quite the contrary. I think technology itself can help us be more mindful and in turn, creative. Take for example, the little discovery I made while helping with the research for the cover story – a nice app called Headspace. It guides users through short, 10-minute capsules of doing nothing; yes, meditation.

For me, Headspace was one big, accidental discovery as a result of this month’s cover story. It was perfectly in line with what I was subconsciously looking for and hence serendipitous. For you, it may be something else. On that note, here’s hoping I managed to bore you, if not a lot, then even a little, with this editorial. 🍷



Siddharth Parwatay
Assistant Editor
siddharth.parwatay@digit.in

“Our very existence could be one big quest to stave off boredom”

A handwritten signature in black ink, appearing to read 'Siddharth Parwatay'.

Got feedback about this column?
Drop me a line at:
siddharth.parwatay@digit.in

A dystopian reality check



Jayesh Shinde
Manager – Test Centre
jayesh.shinde@digit.in

"Technology has so pervaded our lives that it can't just be a domain exclusive to technical students, geeks or entrepreneurs anymore"

Popular sci-fi fiction has us humans reaching for the stars, having developed advanced cognitive systems, artificial intelligences and robots to help minimise the daily grind of our otherwise mundane futuristic lives. Jogging our brain only to take unfathomed leaps of creativity, ingenuity and empathy, we're the master of all races, slave to none. Not even to machines. Or so we'd like to think.

But what if I told you that very soon humanity's going to be so heavily reliant on digital systems and afflicted with large scale dementia that we won't remember what we had for dinner unless we looked up a digital memory of that event? That a Deus Ex Machina situation may never come to fruition due to severe cognitive regression among humans? Too far fetched? Let me make my case.

The Industrial Revolution led to machines aiding and eventually taking over from humans when it came to labour-intensive tasks and doing boringly repetitive actions to save both, our time and sanity levels. With less to do physically, human health suffered as a result, contributing to the rise in obesity. Caught in the middle of a new revolution, where digital systems are in the ascendancy, analysing huge swathes of data to make conclusive decisions with or without user input, we're increasingly falling into a dependency trap where we can't get much done without the help of a digital system. Our long-term mental capability will suffer as a result, by virtue of a simple fact of cognitive science: the less you exercise a mental skill, the progressively worse you get at it.


This applies to everything that we're trying to achieve without having to jog our brain or memory by trusting digital systems to think, store or act on our behalf. Services like Google Now and IBM Watson are the first steps along this path; needless to say, more radical and complex cognitive computing driven products are on their way. And they're all going to try to substitute our brain's ability to think, contributing to the rise in dementia to unprecedented levels over the next few decades. Of course, advances in medical science will try and mitigate this risk, but good luck trying to reverse decades of damage to your brain cells caused by mere inactivity.

That's one aspect to watch out for, brain slowdown, but here's another: an upswing in

the dispassionate use of technology at an alarmingly superficial level. Let me try and explain.

Gadgets these days are driven by designers. We're all busy admiring aesthetics and seem to ignore functionality. Increasingly simplified instances of computing in our lives are making us oblivious to the very technology that's simplifying our lives and the cost of our digital existence and inheritance. If technology is a critical part of our life and society at large, there's an even greater need for us to understand it from the inside out. To do this, in our own unique capacities, we need to get our hands dirty and wrap our heads around it in much the same way that a car owner would when it comes to owning an automobile – not every car owner is clued into the workings of the internal combustion engine, but it's in every driver's best interest to know basic troubleshooting, maintenance, fuel efficiency, mileage and, at a larger level, the environmental impact of automobiles – rather than just knowing how to drive. Similarly, coding knowledge is good to have but not an essential prerequisite to understand how technology works for us and impacts our life, just like you don't need to be a chef to recognise great taste, and more importantly a foul-smelling dish.

Technology has so pervaded our lives that it can't just be a domain exclusive to technical students, geeks or entrepreneurs anymore. All you need is curiosity, which is missing at large when it comes to understanding technology. And when curiosity manifests, it can't just be restricted to superficial levels – like admiring a gadget for how it looks, rather than how it functions. We need to dig deeper and be more intimate with digital systems and realise what we're getting into and what's at stake.

If we fail to get a grip on either the causes or effects of our day-to-day technology use, the dream of a sci-fi future may remain just that. With rising human apathy, our spirit of ingenuity will fast become a thing of the past. And that's a worrying thought. 

Got feedback about this column?
Drop me a line at:
jayesh.shinde@digit.in



↗ B85M-GAMER

↗ H97-PRO GAMER

GAMER SERIES MOTHERBOARDS

PURE GAMING FUN

FLAWLESS AUDIO

- SupremeFX
- For All Gamer Series

■ Sonic Radar II

- Z97-Pro Gamer – H97-Pro Gamer

■ Sonic Radar

- B85-Pro Gamer

FASTER NETWORKING

- Intel Gigabit Ethernet
- For All Gamer Series

■ LANGuard

- Z97-Pro Gamer

■ Gamer First II

- Z97-Pro Gamer – H97-Pro Gamer – B85-Pro Gamer

GAMER'S GUARDIAN

- Exceptionally durable components
- For All Gamer Series

■ Japanese-made 10k capacitors

- For All Gamer Series

GAMING SPEED

- 10 Gbit/s M.2 & SATA EXPRESS
- Z97-Pro Gamer – H97-Pro Gamer



500,000,000 MOTHERBOARD SOLD Since 1989

THANK YOU FOR MAKING US NO.1
IN MOTHERBOARD SALES



CHANNEL CHAMPIONS 2011
MOST PREFERRED
MOTHERBOARD BRAND



DIGIT Icons of Trust 2012
MOST TRUSTED
MOTHERBOARD BRAND



BEST MOTHERBOARD
Infotrend IT Awards
2012



BEST MOTHERBOARD
Manufacturer of the
Year 2013



BEST MOTHERBOARD
Manufacturer of the
Year 2014

*Conditions Apply. All specifications are subject to change without notice. Product availability may vary by region.

ASUS - The World's Best Selling and Most Award Winning Motherboards

ASUS Representative:

Bangalore: 9611100796 | Chennai: 9444489272 | Delhi: 9717691313 | Madhya Pradesh: 9300930028 | Mumbai: 9833329721 | Orissa: 9937019942 | Pune: 9767934721 | Solapur: 7588574764 | Surat: 9879590482 | West Bengal: 9836040976.

www.asus.in | Toll Free No. 1800-2090-365

Sales enquiries: rahul_s@asus.com

For feedback email reachus@asus.com or info_india@asus.com

APRIL 2015

VOLUME 15 \ ISSUE 04

Contents

QUICK NAVIGATOR

001 ENTER

022 DGT
Desire
Greed
Temptation

042 DIGITAL LIFE
Droolmaal
GeekLife

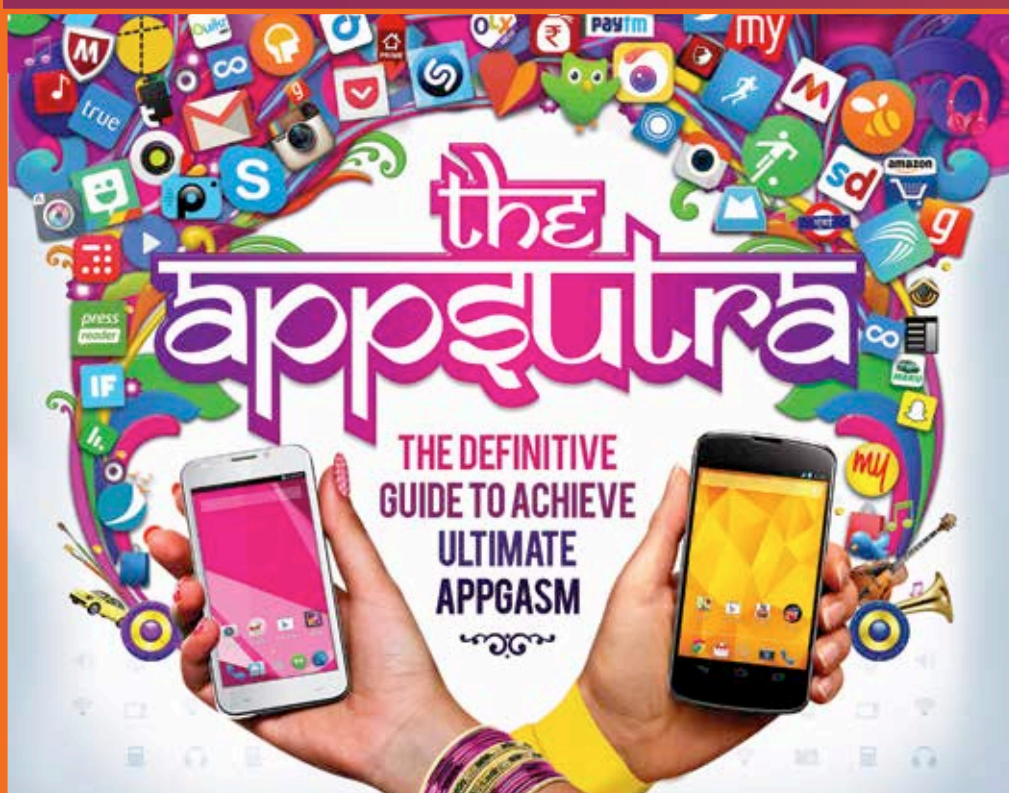
062 SCI-TECH
Space Age

077 STREET SMART
Agent 001
Price Watch
Killer Rigs
Recommended Buys

103 TOOLBOX
Tips & Tricks
Q&A
Workshop

111 TECH@WORK
Industry Connect
Career in Robotics
engineering

119 ESC
Unwind
Community
World View



50 The Appsutra
The definitive guide to achieve ultimate appgasm

116 Resumé on Steroids

It is that time of the year again to start building your resume, and here are the tools that you should be using

TRIED & TESTED



91 CANON POWERSHOT SX520HS
Zoom into loads of fun



98 MOTO E (2ND GEN) 3G
Not the king of budget anymore



100 V-MODA XS
Razor sharp, in more than just the looks

ON THE DVD

Announcements

Catch up on the highlights of the latest releases of products and games, from the Mobile World Congress 2015 and Game Developers Conference 2015.

MWC 2015

HTC Keynote
LG Keynote

GDC 2015

CryEngine Licensee Traier
CryEngine Tech Showcase
NVIDIA Shield Launch
Unity 5 Highlight Reel
Unreal Engine Sizzle Reel

Have some Pi

You will find all the resources and tools in the DVD that will help you in setting up your own computer or media-center using Raspberry Pi that fits right on the palm of your hand.
NOOBS
OpenELEC
SD Formatter
Win32 Disk Imager

Alternate Software

Flux
FreeCommander
IrfanView
LMMS

OpenVPN

Rufus
Sublime Text 2
Vivaldi

Unity 5

Unity 5 game engine
Sample projects
2D Rougelike
Survival Shooter
Resources and Assets

Unity 5 Tutorials

Animations Assets
Audio Effects
Direct Blend Trees
Lighting Overview
Root Motion Authoring
The Standard Shader
and many more...

Free to Play games

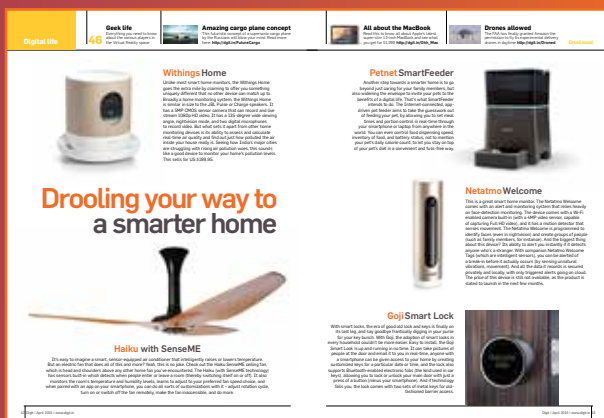
Boring Man
Running Shadow

Demo games

Rolling Sun Demo
Steam and Metal Demo

Sponsored Software

Ashampoo GetBack Photo enables a quick recovery of photos from different storage devices, for example memory cards, smart phones, or USB hard disk drives.



42 Droolmaal

Smart home products

MAKE THIS ISSUE OF DIGIT COME ALIVE



Step 1

Download the Blippar app



Step 2

Keep an eye out for the Blippar icon next to some images



Step 3

Blip the image and get access to video reviews, interactive games, and much more!

62 Going nuts for space

Over the years humanity has come up with some very crazy ways to achieve space travel. Crazier still - some of them might work

109 Creating and optimizing gifs

Tired of not finding the appropriate meme at the right time? Learn to make your own gif!

This is a gif.

MWC 2015
GDC 2015

digit
DVD

UNITY 5 ENGINE



97
ACER ASPIRE E15
571-5673

A good basic laptop. Nothing more, nothing less.



97
LOGITECH X300

Let's get loud!

digit.in

Managing Director **Dr. Pramath Raj Sinha**
 Printer and Publisher **Kanak Ghosh**
 Publishing Director **Vikas Gupta**
 Chief Operating Officer - 9.9 Tech **Krishna Kumar**

Editorial

Executive Editor **Robert Sovereign-Smith**
 Associate Editor **Siddharth Parwatay**
 Multimedia Co-ordinator **Abhijit Dey**

Test Centre

Manager, Test Centre **Jayesh Shinde**
 Reviewers **Anirudh Regidi, Kunal Khullar, Hardik Singh, Mithun Mohandas & Prasad Banerjee**
 Assistant **Vikas Patil**

digit.in

Online Editor **Soham Raninga**
 Assistant Editor **Nikhil Pradhan**
 News Editor **Kul Bhushan**

Design

Sr. Creative Director **Jayan K Narayanan**
 Sr. Art Director **Anil VK**
 Associate Art Director **Anil T**
 Sr. Visualisers **Shigil Narayanan & Sristi Maurya**
 Visualiser **NV Baiju**
 Sr. Designers **Haridas Balan, Charu Dwivedi, Peterson PJ, Dinesh Devgan, Manjith PB & Pradeep G Nair**
 Designer **Vikas Sharma**

Online & Marcom Design
 Associate Art Director **Shokeen Saifi**
 Sr. Designer **Manoj Kumar VP**
 Web Designer **Om Prakash**

Photography
 Sr. Photographer **Jiten Gandhi**

Contributors

Writers **Ashesh Lall, Avinash Kothuri, Elroy Desmond, Kshitij Sobti, Manish Singh, N Ragavan, Samir Alam, Siddhant Sharma, Varad Choudhari**
 Copy editing **Infancia Cardozo**

Production and Logistics

Sr GM - Operations **Shivshankar Hiremath**
 Manager Operations **Rakesh Upadhyay**
 Asst Production Manager **Vilas Mhatre**
 Production Assistant **Brahmanand Nikalje**
 Manager Logistics **Vijay Menon**
 Asst Mgr Production & Logistics **M P Singh**
 Executives **Mohd. Nadeem Ansari, Nilesh Shiravadekar**

Brand

Product Mgr **Shreyans Daga**
 Asst Product Mgr **Sourabha Shakya**
 Mgr - Online **Shauvik Kumar**
 Co-ordinator / Scheduling **Kishan Singh**

Circulation Sales

Head - Circulation **Samir Mehta**
 Regional Mgrs **Jayanta Bhattacharyya, Norbert Joseph**
 Manager Circulation **Dharmendra Singh**
 Executive **Vijay Mhatre**

Reader Services

Executives **Sudhir, Shabana, Pradeep, Bhishm**
 +91-22-67899678 / help@digit.in

Cover Design **Anil T**

TO ADVERTISE

Email: sales@digit.in

Sales Director:
Lalit Arun, Mobile: +91-9582262959

South:
Ram Sarangi, Mobile: +91-98864 06961

West:
Sajeed Momin, Mobile: +91-98192 44603
Suvarna Shringarpure, Mobile: +91-93249 28247

North:
Debleena Majumdar, Mobile: +91-98101 19492

East:
Jayanta Bhattacharyya, Mobile: +91-93318 29284

ADVERTISING INDEX

Brand	Page No
Apacer	IFC
Asrock	13, 67
ASUS	IBC, 3, 53, 55, 57, 59
Canon	BC
Computex	21
Dell	9, 11
iBall	7, 61
India AV	123
IOCL	33
Mediatek	15
Produt Antivirus	121
Quantum	124
QuickHeal	25, 41
RDP	39
Snapdeal	17-20
TP-LINK	23, 27

Published, Printed and Owned by Nine Dot Nine Interactive Pvt. Ltd. Published and printed on their behalf by Kanak Ghosh. Published at Bunglow No. 725 Sector - 1, Shirvane, Nerul, Navi Mumbai. 400706. Printed at Print House (India) Pvt. Ltd. R-847, TTC Industrial Area, MIDC, Rable, Navi Mumbai 400701. Editor: Anuradha Das Mathur

"We do not endorse or recommend any product or service advertised in the magazine. The advertisement's in this magazine are for information purposes only. We do not, expressly or impliedly, warrant or assume any liability or responsibility for the quality, accuracy, completeness, legality, reliability, usefulness or claims of any product or service advertised in the magazine. Our readers are strongly advised to carry out their own independent assessment of the product or services advertised in the magazine."

Disclaimer

For every Digit contest, there will be only one winner, unless specified otherwise.
 In the event of a dispute, the Editor's decision shall be final.

PRODUCTS REVIEWED THIS MONTH

Bazaar

Acer Aspire E5-571
 Antec GX900
 ASUS GTX 960
 Boat Pitcher Portable Speaker
 Bowers & Wilkins P3
 Canon PowerShot SX520 HS
 Corsair Carbide Silent 100R
 Dell Inspiron AIO 3310
 Gigabyte GTX 970 G1
 HP Stream 8
 Inno 3D iChill GTX 960
 Logitech UE Boom
 Logitech X300
 Micromax Canvas Hue
 Moto E (2nd Gen 3G)
 Tata Photon+ 3G Box
 V-Moda XS
 Xiaomi Redmi 2
 ZOTAC GTX 960

Comparison Test

Binatone AppStar
 Eddy Tablet
 Mosti Chota Bheem
 Sky Kidz SkyTab 2
 Swipe Junior
 Minix Neo X7
 Minix Neo X8-H Plus
 iRevo SMART TV Box

MAKE THIS ISSUE OF DIGIT COME ALIVE



Step 1

Download the Blippar app



Step 2

Keep an eye out for the Blippar icon next to some images



Step 3

Blip the image and get access to video reviews, interactive games, and much more!



WORK

PLAY

CONNECT

Speed of 1.7GHz
OCTA CORE
Processor

Stunning Display
IPS HD
25.65cm (10.1") Screen

Rear
13MP

Front
5MP

Phone & Video
CALLING

RAM
2GB

Storage
16GB

FLEXIBLE
FOR TERRIFIC PERFORMANCE

BRACE - X1
PERFORMANCE TABLET PC



i
ba11 SLIDE™
Enjoy the ride

Best IT World (India) Pvt. Ltd.: Email: sales@iball.co.in Mumbai - 022 6774 5100 / 3081 5100 / 98900 52890, Ahmedabad - 9909012276, Bangalore - 9611194666, Bhubneswar - 9861033284, Cochin - 0484 - 2207141 / 42 / 43 / 44, Chennai - 044-42168560, Dehradun - 9639004150, Guwahati - 9435731459, Goa - 080070 35766, Hubli - 9611194669, Haryana / Himachal - 8750076813, Indore - 98270 89906 / 73899 09965, Jaipur - 9351782703, Kolkata - 8017518545, Ludhiana - 95011 04921 / 22, Lucknow - 8400272727, New Delhi - 8860080588, Nagpur - 9371403907, Nashik - 9371469439, Pune - 9970198418, Patna - 0612-2200664, Raipur - 7879783948, Ranchi - 065-12341022, Secunderabad - 9246802281

www.iBall.co.in | Over 45 million iBall products sold

Contact us



Tell us what you feel about Digit

If you have an opinion about anything published in Digit, or about technology in general, write to editor@digit.in or call at **+91-22-678 99 700**. To interact with the authors of specific articles, please write to the email address specified under the author's name



Software on the DVDs

To submit and suggest software or any other type of content, to be included in the Digit DVDs, write to dvd@digit.in or call **+91-22-678 99 707**



Q&A

If you're having trouble with your PC or a gadget, our experts can help solve your problems. Just write in to sos@digit.in. Remember to include full system configurations in your email.



Agent001

Our very own secret agent will give you the lowdown on what to buy, from where and for how much. Send in all your buying advice or questions to the coolest agent ever. Write to agent001@digit.in



Help!

For copy-related issues, delivery status or any other complaints regarding our service, write to help@digit.in or call **+91-22-678 99 678**



Subscribe

Want to subscribe to India's #1 Technology Magazine? You should, because we have exciting offers for everyone, and you save money in the bargain. SMS: **<DIGIT SUB> to 92200 92200** or visit www.digit.in/subscribe



Product testing

Want your product reviewed by Digit? Contact our Test Center at testcenter@digit.in or call **+91-22-678 99 708**



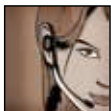
News and new product launches

To announce new product launches and press releases, email us at pressrelease@digit.in



Endorsements / reprints

Interested in ordering article reprints or in using our logos? Get the requisite permissions by contacting us at reprint@digit.in



Business enquiries

Think we can help you grow your business, or maybe you can help us grow ours? Get in touch with us at business@digit.in



Careers

Want to work for Digit? Send us your resume at careers@digit.in



Sponsorship

Want Digit to sponsor your tech event? Send your proposal to sponsor@digit.in

Digit Facebook Pages

Join the group that suits your need!



<http://www.facebook.com/thinkdigit>

Your favourite

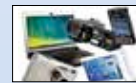
magazine on your favourite social network. Interact with thousands of Digit readers and have some geeky fun!



<http://www.facebook.com/techkranti>

Let's wake ourselves up and gather the tools

of tech to change the future of our great nation. Join The Revolution!



<http://www.facebook.com/IThinkGadgets>

Community of People

who love mobiles, laptops, cameras & other gadgets



<http://www.facebook.com/consumermate>

Expert buying advice and some awesome offers



<http://www.facebook.com/devworx.in>

Community of software programmers who

enjoy writing code and want to grow their career in software development

Interact with Team Digit



[digit.in/twitter](https://twitter.com/digit.in)



[digit.in/facebook](https://facebook.com/digit.in)



[digit.in/youtube](https://youtube.com/digit.in)



digit.in/forum



Dell™ recommends Windows.



2-in-1 PCs that adapt to you.

Find laptop performance and tablet convenience in your choice of 2-in-1 PCs.

- **Robust performance** - Power is all yours with up to a 4th Gen Intel® Core™ i5 processor.
- **Four-way flexibility** - A 360-hinge lets you switch between laptop, tent, tablet or stand / easel mode.
- **Built-in stylus** - Take notes, sketch or edit photos with ease.
- **Precision touchpad** - Scroll, zoom, click and point with impressive accuracy and speed.



Laptop when you need it.
Tablet when you want it.

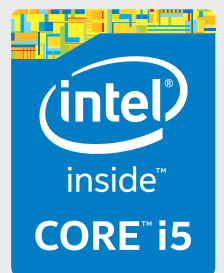
2-in-1 PCs are powered by Intel® Core™ i5 processors.

 Dell.co.in/buyonline  www.facebook.com/DellIndia

Locate the nearest Dell stores: **SMS Dell <Your Place> to 90088 90088.**

***Stylus is only applicable for Inspiron 13 7000 Series 2-in-1.**

*Subject to T & Cs. For more details, see <http://www.dell.co.in/tnc>. **Trademarks:** Dell and Inspiron are trademarks of Dell Inc. Intel, the Intel Logo, Intel Inside, Intel Core, and Core Inside are trademarks of Intel Corporation in the U.S. and/or other countries. Microsoft and Windows are trademarks of the Microsoft group of companies. All other trademarks are the property of their respective owners. **Copyright:** © 2015 Dell Inc. All rights reserved.



iDiot

Now, now, hear me out before you burn bald effigies of me for blaspheming against the all-powerful Apple gods! I'm not calling people names; it's probably what people will call me after reading this column.

First a little preface.

<preface>

I've always been a tablet + phone advocate (as opposed to the only-phone school of thought). I have an iPad 3 *and* a Nexus 7, because I wanted to experience both major platforms. (I also have a Playbook, but shhh you never heard me say that...)

My personal preference is also no secret. Apple, quite simply, makes the very best tablets out there. Except the iPad Minis – those things suck (a personal opinion, so don't stalk and murder me over it).

For me, a tablet and a phone are very different use cases. I use a tablet with my feet up, in relaxed mode. Maybe I want to watch the latest episode of *The Walking Dead* or listen to Neil DeGrasse Tyson wax eloquent about the universe (actually, I could listen to him or Morgan Freeman read the dictionary and not get bored). Maybe I want to play a few games or read my e-Magazine subscriptions... whatever it is, it's feet up stuff.

A phone, however, is all fast-paced and transactional for me. It's smaller because it has to be. I need email, a good typing experience, decent browser, no lag in performance and obviously a good calling experience. Contact management, messaging (social and work), calendar, tasks, etc. are also very important. So what do I use as my primary phone? A very unpopular choice – the BlackBerry Z30. Or rather, I did...

</preface>

I've been very intrigued with the iPhone 6 Plus ever since it launched. It's too expensive for me to buy and try, but what's the point of working at Digit if you can't try without buying, right? For this month's app story, we had to call for some iPhones and I got an iPhone 6 Plus to fiddle with.

I couldn't wait to cut my micro-SIM into a Nano SIM to shove it into the 6 Plus and get started. I probably spent a couple of hours oohing and aahing, much to everyone's disdain. I'm not a phone reviewer, and thus may have limited exposure to the phones out there,

but the 6 Plus has the sexiest screen I've ever used. #Bendgate be damned, I'd be willing to wear dorky shirts with button-pockets for that screen!


And yet here I am, a few days later, using a BlackBerry Passport (one of the worst form factors for me personally) over what I consider the best form factor (iPhone 6 Plus), merely because of the OS...

Why not the Z30?

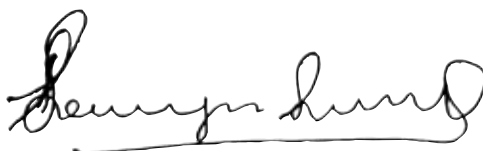
After I was put off by iOS (read below), I had to get a nano to micro-SIM adapter, but absent-mindedly pushed the adapter, sans SIM, into the Z30. When I yanked it out again, I bent and broke some SIM contact pins and had to send it off for repair.

As for iOS: after the excitement of the screen died down, I realised that using email is a chore on iOS (comparatively), as is double-tapping that silly hardware button to jump to another open app. For someone who switches between apps constantly – most commonly four email accounts, WhatsApp, Facebook, phone app and contacts, SMS, browser and Tapatalk – iOS just seemed too clunky. If I'd never used BlackBerry 10, maybe I wouldn't know any better, but I do. I like the Hub and the swipe-up-to-change-app fluid gesture of BlackBerry 10.

I also suspect that had I actually bought the 6 Plus with hard earned money after going ga-ga over the screen, I might fear ridicule and just force myself to get used to the iOS way of doing things (for, well, 60K+ reasons!).

Call me an iDiot if you want, but if BlackBerry (instead of experimenting with models such as the Passport) would just make a phone physically identical to the iPhone 6 Plus, I'd happily throw my money at it! For now, I still love iOS for a tablet OS and BlackBerry for a phone. Sorry Fandroids, although I do love the freedom to tinker with APKs, I can also do that on a BlackBerry with all non-Google-made apps. 

Please send hate mail to robert@digit.in with the subject "iDiot"




Robert Sovereign-Smith
Executive Editor
robert@digit.in

"For me, a tablet and a phone are very different use cases. I use a tablet with my feet up, in relaxed mode... A phone, however, is all fast-paced and transactional..."

Liked or hated this column?
Write in to robert@digit.in
and let me know your thoughts.



Your wish is its command.

The Dell 2-in-1 series is a laptop, a tablet and whatever you want it to be.



It is a work of art.

Light in weight, yet heavy on sleekness and style, this machine is crafted to accompany you everywhere. At less than an inch thick, it also has 360° movement, allowing it to be used in whichever way is easiest. With an HD IPS touch display and stylus, it is convenience, portability and versatility, all packed into one elegant design.

It is a powerhouse.

Backed by the reliable technology of Intel processors, it offers high speed and efficiency so you can rest assured of quality performance whether you're surfing the web, writing your essay or uploading photos. A 500GB hard drive means that there will never be a shortage of space, and 4GB memory keeps the multi-taskers happy, enabling multiple applications to run seamlessly at the same time. It also has about 8 hours of battery life, ensuring continuous, unmitigated power.

It's for everyone in the family.

Whether it's watching movies, following the recipe while cooking, making an office presentation outside work, doing the school project or taking pictures on the family vacation, the Inspiron 2-in-1 series has a classy, smart solution for everyone's needs. While it sits perfectly on a table, its easy switch-to-tablet functionality ensures that the Dell Inspiron 2-in-1 is just as comfortable in your shopping bag – making this tablet-laptop the ideal, multi-faceted companion for everyone in the family.

Work anywhere. Play anywhere.

With long-range WiFi with strong connectivity, and a high definition (720p) webcam that makes Skype and Google Hangouts almost life-like, the Inspiron 2-in-1 ensures that everything is nearby no matter where work takes you. It also comes with an extended battery life that is designed to withstand all-nighters, and Windows 8.1 to facilitate easy navigation. It has multiple ports that allows the Dell device to be easily connected via HDMI and linked with another monitor or TV. It also makes transferring of large files through its USB 3.0 port and SD media card reader a breeze. So now, take your office with you.



The Dell Inspiron 2-in-1 series is the best of both worlds. As perfect for the family as it is for the workaholic, it is the device that everyone will love.

dgt

It's back, and it's inside Digit. It's still a work in progress, but send us feedback about it. We're going to try and integrate it seamlessly, so your feedback will be valuable

Moto 360 2

Pictures have surfaced online showing a different looking Moto 360. Can it be the second coming of the smartwatch?
http://dgit.in/360_2

✉ Hello Digit,

I'm an 18-year-old, proud to get a copy of Digit every month. I was so influenced by your last cover story that I wanted to meet each of you in person, but as of now this is my only means of interaction with you.

I'm very happy about your Tech Karma initiative. It kindled a fire in me to help the helpless and needy. I will do my part and wish you best of luck in this endeavor.

Digit has significantly helped improve my intelligence when it comes to tech. I've got some recommendations for the No.1 tech mag, which are as follows:

1. Please don't stop giving the interactive Skoar! magazine in your DVD.
2. Regularly update the download section on your website.
3. It's been a long time since you compared antivirus software. Maybe you could do it this time.
4. If possible, add an adhesive tape on the poster (just like on DVD wrappers) so that it's easy to paste.
5. Enlarge the subscription package by a bit. It usually tears while shipping due to the tightly packed subscription copy.
6. If you can, please increase the DGT section.

A huge fan

—Ujjwal Jaiswal

Hi Ujjwal,

Thank you for the best wishes, but please remember that it's only readers like you who can make that endeavour a success, and to that end, we must be thanking you for your support. Regarding the rest of your queries:

1. We're working on something even better. ;)
2. We're working on that as well.
3. Dedicated websites like <http://www.av-test.org/en> do an excellent job of testing AV suites and our efforts would be a bit redundant here.
4. We've received a lot of complaints regarding the use of the tape, but we'll see what can be done.
5. Drop us a mail on editor@digit.in with images and more details. We'll do our level best to prevent the tearing.
6. But...but..what about the rest of the magazine?

—Anirudh Regdi

Feedback for the March 2015 issue of Digit



✉ Hello Team Digit!

This is my first letter to you. I'm one of the biggest fans of your magazine. I love Siddharth and Jayesh's columns very much. Oh, and of course! The insane man, Robert.

In last month's issue, I was impressed by Jayesh's editorial calling for more geek girls in technology and Digit Squad writer, Praneet Sah's tutorial. The exploration of Europa in the Space Age section was also awesome. Sorry! Last month's Fast Track was of no use to me, but the software you provided helped in my studies to some extent.

I want to give you some suggestions regarding the magazine:

1. Please provide some tutorials (and a Fast Track) for After Effects CC.
2. Please don't provide Steam games. I'm unable to install them. They all require some sort of key. If you provide Steam games, then please include a tutorial on how to install them (It won't take much space).
3. Dedicate more space to topics related to astronomy or science.
4. Many others have also advised you about this: Change the DVD theme (As soon as possible). The interface could resemble Windows 8.1 or Android GUI.
5. Finally, include a column on health

and fitness. This may sound boring but is necessary considering how many hours geeks are slouched over on their computers. You could mention how to avoid muscle pain and headaches. It won't take more than 2 pages. And a video or Fast Track on health and fitness would be great. Many will preserve the Fast Track for years and follow it.

—Amandeep Kumar

Hi Amandeep,

This is our first response to you. We're fairly certain that we enjoy reading our readers' letters as much as you do our columns, so please don't stop writing to us. This was your first letter, but don't let it be the last.

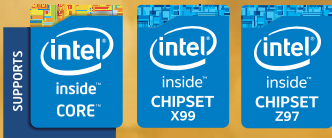
We're very glad that you liked the issue, especially if some of the content has positively impacted your studies.

Those are some nice suggestions for an FT by the way, we'll try to cover those topics in the near future. Ditto the health and science stories.

Also, regarding the Steam games, we do provide a tutorial on installation on every DVD. Please follow the instructions to the letter and you'll be fine. We understand that the installation of Steam games can be a bit of a pain, but much as we'd like to avoid carrying them on the

ASRock

No. 1 in Motherboards



2014
Tom's
Hardware



CAN'T STOP. WINNING.

National Distributor



Online Retail Stores



Service by



The brand and product names are trademarks of their respective companies.

www.asrock.com



More Freesync incoming

AMD announced four new monitors with support for its FreeSync technology heating up the war in gaming displays http://dgit.in/Free_Sync



AMA: Sir Tim Berners-Lee

Check out the top 12 answers given by the inventor of the WWW, Sir Tim Berners-Lee on a Reddit AMA <http://dgit.in/TimAMA>

LETTER OF THE MONTH

✉ Hello Team Digit,

I finally managed to put some words on my computer after having compiled them a thousand times in my head. Yes, I know there was some problem with last month's issue and I got the issue late, but it's okay. The editorials made up for the delay. All of them from Sid, Jayesh and the (not literally) big daddy Robert were amazing! The article on the lack of "Girl Geeks" (or Geek Girls) in technology gave me hope because now that you guys are on board for that cause, I have faith that this would soon be an issue of the past.

I've had exposure to computers since the age of 2.5, and have been reading Digit since around Class 4. My father also read the magazine and still reads it. From 15-year-old guys to 50-year-old uncles, all would come to me if they needed any tech help. I even managed to get into Computer Science and Engineering. And I must say here that Digit taught me more about computers in my 4 years of engineering than all of my college staff put together! This isn't something against the educational system (though it deserves some chiding), but that's how truly important you guys are in my life.

Fast forward to September 2013, when I was in my 7th semester, final year. We had placements in our college and NVIDIA was one of the hiring companies. Now, for my college, NVIDIA was the biggest technology brand anyone could think of. I needed intrinsic details on

computer hardware to prepare for the interview, and somehow googling it only returned stupid question-answer articles to mug up. Then, just like the crowbar to Gordon Freeman, came the September 2013 issue of Digit and along with it, a 'Fast Track to Computer Hardware'! The day I received it I felt that its timing involved some sort of sorcery. Today, I work for NVIDIA and have no one else to

thank but you because if it weren't for that issue of Fast Track, I wouldn't have ever cleared the first round of test, however competent I was for the interviews.

And it's not just this one thing. I've been seeing a change in myself as a person as well. I'm friends with Robert on Facebook, and keep reading things on your website. You guys don't just make a person smart, you make a person better. So that's how I owe you one!

Geeky regards,

-Abhyudaya

PS: I have one request from you guys. I participated in the last CTC. Please bring out the next one! If you want, I can help you design it! But, please get it out, people are dying to participate!

📌 First, just a clarification, Jayesh is the Big Daddy (literally too). Jokes aside however, this is truly a humbling letter for us and maybe for the first time, we're truly at a loss for words. Here, take that Antec PSU and scram. *wipes away a tear*

- Agent001



DVD, Steam is almost the only source of games and demos so it's a choice between carrying games or not carrying games. We hope you understand. And yes, we're actually working on a new DVD interface as we speak.

- Abhijit Dey

✉ Hello Team Digit,

I've been reading Digit magazine since the past few months and it's been an awesome experience. This month's Digit was very good, especially the software for kids and Half Life 2 mods, which were awesome to play. I have some suggestions:

1. The DVDs you provide are great, but please stop providing Steam games because in India, (and specifically in my area) I have difficulty in constantly updating Steam and Steam games due to very slow internet connection.
2. Also start providing smartphone apps and games in your DVDs.
3. Include more articles about tech innovations in Education.
4. I read in the previous Letter of the Month that the adhesive used in the mag is of very poor quality, making the package hard to open. Please do something about this.

5. Do more product reviews in the Bazaar section.

That's all. Everything other than this is awesome about you. I have no other complaints and also want to tell you some great things about your magazine:

1. The best thing about Digit is that it's like the Wikipedia of the tech world, so one doesn't need to look at other tech sources.
2. I like the posters you provide with Digit a lot. Thanks for that.
3. Providing digit.in in Hindi was a great move.

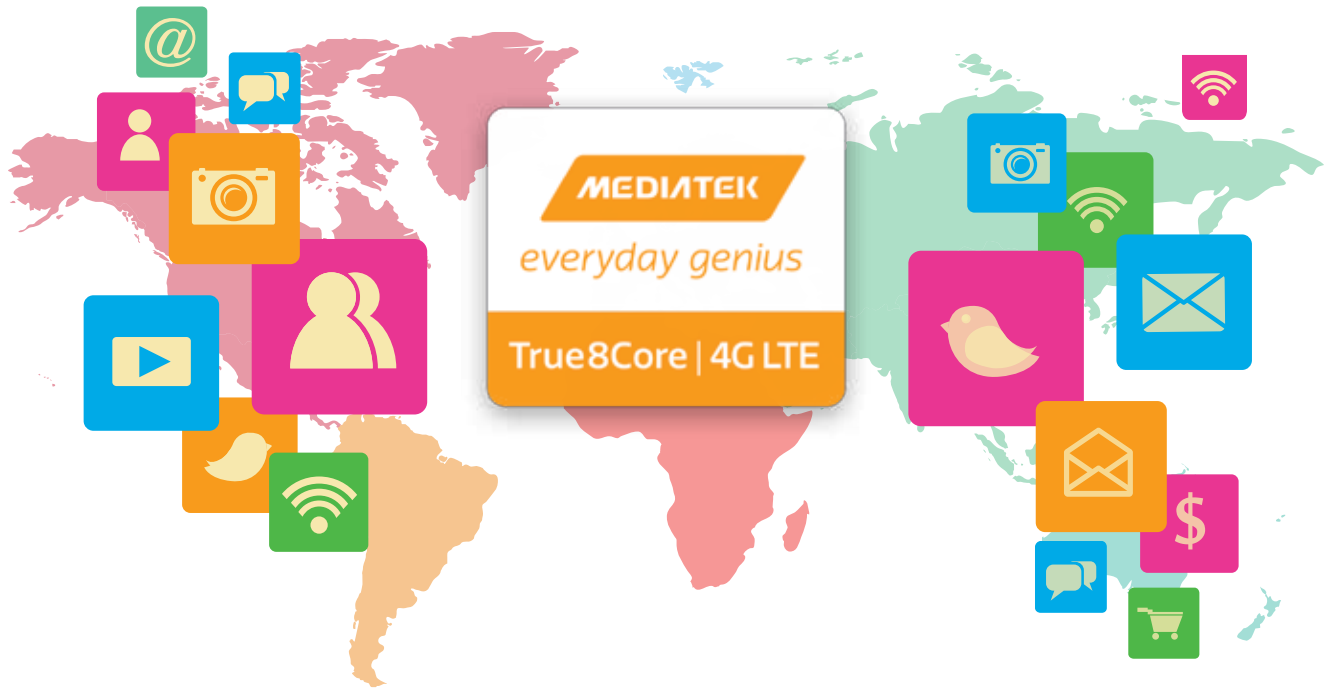
The work Digit is doing in India - both, offline through the magazine and online through digit.in - is awesome. Keep doing it.

-Kunal Joshi

📌 We aim to please and we're very glad that you're pleased.

1. Please refer to our response to Amandeep (the previous mail) with regards to Steam games. If we had an option, we'd avoid providing Steam games altogether, but sadly, it's almost the only source of games around these days.
2. There are legal issues regarding the distribution of smartphone apps and games on the DVD which we just can't circumvent. Sorry.
3. That's a nice idea for a story. We'll keep it in mind for a future issue.
4. We're looking into this issue very closely and are doing our best to resolve it.
5. We'd love to increase the size of bazaar, but then we'd have a 100 other mails

The World's First 4G True8Core™ SOC



COMPUTING

- ▶ **First to adopt ARM® Cortex™-A17 CPU**
Up to 2.2GHz in big.LITTLE™ HMP architecture with CorePilot™ technology
- ▶ **Imagination Technologies PowerVR™ Series6 GPU**
High performance GPU at 600MHz, support 2560x1600 60fps display support
- ▶ **Dual-channel LPDDR3 memory at 933MHz**

MULTIMEDIA

- ▶ **20 MP camera with dual ISP**
Support rich features such as video HDR & video face beautifier
- ▶ **Industry-leading H.265 Ultra-HD video codec**
Support real-time video zoom-in/out during Ultra-HD video playback
- ▶ **High-end display support (2560x1600 at 60fps)**
Feature MiraVision™ and ClearMotion™ display enhancement technologies
- ▶ **High performance audio DAC with 110dB SNR**
Support 24-bit, 192KHz Hi-Fi quality audio codec

NETWORK

- Integrated 5-mode LTE modem
TDD/FDD-LTE, HSPA+, TD-SCDMA and EDGE
- Wi-Fi 802.11ac support

MEDIATEK

everyday genius

MediaTek Inc.

mediatek.com

For local enquiries

sales.india@mediatek.com

+91 120 4343900



Control through mind

Darpa made a quadriplegic woman control a F-35 Joint Strike Fighter Jet in a simulator using only her mind <http://dgit.in/ContMind>



How to hypnotize sharks?

As bizarre as this may sound, it's actually possible to hypnotize a shark and other predators. Know more here: <http://dgit.in/SharkH>

asking us why we cut down on the other sections!

Thank you for the compliments and the feedback. It's what keeps us motivated and also the thing that keeps us on our toes. Thank you.

– Siddharth Parwatay

✉ Hello Team Digit,

I'm an 11-year-old reader of your magazine (Oops! I forgot "awesome"). I've been reading your magazine for a year now and this is my first letter to you. I wanted to give you some suggestions.

Magazine:

1. The paper quality of the FTs is very cheap and the pages get torn right off, so please try to improve it.
2. I found many typos all over the magazine. Yes, it's impossible to eliminate every error but please try to minimise them.
3. Can you please include some non-Steam games in the DVDs?
4. Change the interface of the DVDs.

Packaging:

1. The tape you use to stick everything is very strong and so, every time I get a poster with a white patch on it.
2. However, the adhesive on the DVD cover is not strong enough and many times the cover is open. Please look into the matter.

Please don't think that I dislike the mag. I completely love it as it gives us readers so much knowledge about technology and it's the best tech mag in India.

–Anurag Chittawar

✉ Hello Anurag,

Our warmest greetings go out to you, our awesome, 11-year old reader (we didn't forget). Thanks for the feedback, we'll do what we can about the sticky tape and yes, it's inexcusable but typos manage to sneak past our weary eyes from time to time. Regarding the Steam games and the DVD interface, please refer to our previous two responses.

We don't think you dislike the magazine, not at all. Only someone who cares about the magazine very much will send us a letter such as yours and it's for

readers like you that we write. Do keep writing more often.

– Mithun Mohandas

✉ Dear Team,

First of all Belated "Happy Women's Day" to all the Girl Geeks in your team. May the Force be always with you (a la Star Wars).

Now coming to the Digit March Edition. I was in a state of shock when I didn't receive my subscriber copy within the first few days of the month. On dropping a mail, I found out that it would be delivered only after the second week due to unavoidable circumstances. The digital issue via the Read-Where app came to the rescue. However, the delay make me reconsider wanting to renew my Digit subscription, as co-incidentally March is the last month of my subscription. But then, I remembered the past twelve months of Digit and felt nostalgic. It reminded me how deeply attached I am to it. Also, out of 12 issues, I received 11 on Day 1 of the month. This was enough for me to renew my subscription with the special discount offer for another year.

Quickly coming to the feedback for March edition:

1. Providing more interactive pages helps Digit magazine come alive and also reminds one of Harry Potter-like fantasy reading.
2. Integrating DGT into the main magazine is a welcome move.
3. The cover story elevates my respect towards your magazine and I pledge to be part of your Tech Karma initiative. I feel proud to be a part of it.
4. Offbeat topics like Sci-Tech leaderboard and tech companies behind all other tech were quite informative.
5. Skoarl, Fast Track, DVDs and gaming posters had great content.

Few suggestions I'd like to make:

1. The DVD layout is now quite old and I'm aware that you guys are working on a new interface, but it seems to be taking too long to implement it. Kindly make the change ASAP.
2. The QR code for all the links mentioned in Digit was missing. Kindly accumulate all the web links, including links mentioned in the snippets at the top of pages in one location.

3. There's a typo in the Agent 001 Q&A section where the RAM for Asus Zenfone 5 is mentioned as 1GB, whereas it has 2GB of RAM.
4. Provide a wider range of posters, if possible, rather than gaming posters always.
5. Do a Fast Track that gives us a sneak peek into VR consoles and the tech behind them.

Among real life heroes who inspire me, Digit is one such tech magazine and it's an integral part of my life. I've been reading the magazine for more than 6 years now and wish to be a part of it forever. Keep rocking.

–Abhishek Kapoor

✉ Dear Abhishek,

Our sincere apologies for the delay in delivering your issue. As you would have already found out when you wrote to us, the issue was delayed due to circumstances that were completely out of our control and there was quite literally nothing that we could do about it. Coming to your feedback:

6. We're working very closely with Blippar to improve interactivity and you should see a lot more interactivity over the coming months.
7. Thank you for supporting the Tech Karma initiative. The cover story will remain just that, a story, without the support of dedicated readers such as yourself.
8. Now now, control yourself, too many complements will make us blush.
9. Yes, the DVD layouts are a sore point and we are working on it, sadly, it's just taking much longer than we expected.
10. The Zenfone 5 comes in two variants, offering 1GB and 2GB of RAM.
11. A fast-track to VR is a nice idea, but most of the tech is still in its infancy and an FT at this stage will not do the topic the full justice that it deserves.

It's feedback from long-time readers such as yourself that keep us grounded and striving to improve. Keep sending us more feedback, compliments and constructive criticism, it inspires us to improve and we'll do our best to keep on rocking!

– Anirudh Regidi

GO GA-GA OVER GADGETS



10 Gadgets that offer power-packed
performance at best prices



snapdeal

India's largest online electronics store

iBall Slide WQ32 with keyboard

Ball Slide WQ32 is a stylish yet powerful tablet running on Windows 8.1. It is powered by a 1.83GHz Quad-core Intel Atom Z3735D processor. This powerful processor combined with 2GB of RAM is able to handle 1080p movies and games with ease. The tablet features an 8-inch IPS HD display with a resolution of 1280 x 800p which is bright enough and offers nice viewing angles. The display further compliments the processing power of the tablet as it offers good colour balance as well as comfortable viewing angles. The tablet offers 16GB of internal storage which could be further expanded via microSD card as the tablet support storage of upto 64GB. On the connectivity front, it offers 3G connectivity via SIM, besides WiFi and bluetooth. The tablet also includes a 5MP rear and a 2MP front facing camera which is good enough for skype calls. The 14Wh polymer battery will make the tablet last through all your important work and more.



JBL Go Wireless Portable Speaker

This tiny little speaker from JBL promises wireless music and quality without having to worry about the comfort and convenience of carrying a bulky Bluetooth speaker. While

JBL Go Wireless is also a Bluetooth speaker, the compact dimensions of the speaker combined with pretty decent power ratings makes it an ideal portable speaker. The 3 watts RMS rating is actually pretty good for the size of the speaker, add the five hour rated playback time of the

inbuilt battery and you get a power packed package. The best part about these speakers is surely the pricing. Available at a special price-point of Rs. 1,999 only on Snapdeal, these speakers tick all the boxes for an affordable portable speaker. Apart from wireless connectivity, the JBL Wireless Go also has a built-in audio-in jack, allowing you to connect any device via a 3.5mm stereo cable. The device is charged via a micro USB port, and comes bundled with a micro USB cable.



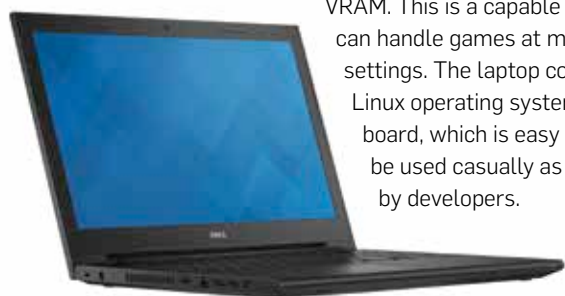
Lenovo Y50-70 Gaming Laptop

Lenovo is the king of mass market laptops and the Lenovo Y50 series is Lenovo's take on how a gaming laptop should be. Lenovo Y50 is good looking gaming laptop powered by a 4th gen Intel Core-i7 processor (4710HQ). The processor is powerful enough to handle gaming with ease. This processing power is complimented by an equally powerful 4GB Nvidia GeForce GTX 860M GPU which can handle most latest games at high settings. The laptops packs an 8GB DDRL3 of RAM and an efficient SSHD 8GB + 1TB hybrid storage drive. The lid of the laptop is covered in brushed aluminum which showcases angled creases which adds up to its distinctive design. The laptop features a 1080p Full HD panel which has good viewing angles. This is a glossy type panel which deliver more intense colors and better contrast over the matte displays. It also features JBL powered speakers which offer crisp sounds and deep, balanced base. While gaming, a right keyboard is a very important and the island type keyboard on the Lenovo Y50 has a acceptable travel and feedback.



Dell Inspiron 15 3543 laptop

This power-packed laptop from Dell is an ideal buy for anyone looking for a performance laptop at an affordable price point. The Dell Inspiron 15 3543 is based on the latest Intel 5th generation platform, featuring 5th gen Intel Core i5 processor clocked at 2.2 GHz. With the latest Intel platform, the Dell Inspiron 15 has a clear advantage in terms of higher performance and battery life. Whether you are a student or a professional, the Dell Inspiron is a good laptop to buy. The laptop offers a 15.6-inch LED backlit display which offers good viewing angles and nice colour saturation across the panel. The laptop is provided with 8GB RAM, which is more than enough to handle day to day tasks and much required for memory for intensive tasks. The graphics department is handled by a Nvidia 820 GPU with 2GB of VRAM. This is a capable GPU and can handle games at medium settings. The laptop comes with Linux operating system on-board, which is easy enough to be used casually as well as by developers.





Samsung Grand Max

Samsung Galaxy grand is Samsung's budget offering for customers who crave a slightly larger screen. The phone offers a 5.25 720p HD display which offers good clarity and rich image details. The display has good colour vibrancy as well as okay sunlight legibility. The smartphone is powered by Qualcomm's latest 64-bit Quad-core 410 SoC with its CPU cores clocked at 1.2Ghz. With 1.5GB onboard the system is powerful enough to stream videos, watch Full HD content and play games with ease. Day to day tasks are dealt with ease and without any lags. The Galaxy Grand comes with a 1.5GB of RAM and a 16GB of internal storage. On top of that that the storage can be further increased via a microSD card as the phone supports storage of upto 64GB. It is a Dual-SIM phone and with the Qualcomm 410 on board this phone is 4G capable. Samsung has improved its design over the past year and the Galaxy Grand looks and feels much more premium. At 7.9mm it is also one of the slimmest phone in its budget. The phone features a 13MP camera at the back which take crisp and vibrant images. The camera app has tons of optimization options for the photographer in you. At the front there is a 120 degree wide angle selfie centred 5MP camera which can take selfies with voice command. The phone features a 2500mAh battery which keeps the phone powered for the entire day.

LG 42UB820T 106.68 cm (42) 4K Ultra HD LED Television

LG makes some of the best televisions in the market and the LG 42UB820T is one of them. The LED TV features an almost bezel-less design which makes watching 4K content on the TV a much superior experience. It has an 42-inch (106.68cm) LED display with a max resolution of 3840 x 2160 pixels. This TV features LG's True Colour precision technology which offers clearer and more life-like images. It can be hooked to wireless network and the TV can stream content over Miracast. Apart from wireless options the TV has an various physical connectivity options like 2 HDMI ports. It also has a 2 channel 20 watt speaker system at the back.



Infocus M2

Infocus is a new entrant in the Indian market and the company is starting off with a budget friendly smartphone, the M2. The Infocus M2 is a 4.2-inch smartphone running on the Android Kitkat 4.4.2 platform. Infocus overlays its own InLife UI on the top of the Android platform to make it much simpler. The smartphone sports a 4.2-inch 720p HD display which offers good viewing angles and better colour reproduction. The Infocus M2 is powered by a 1.3GHz MediaTek processor coupled with 1GB of RAM. This translates into a lag-free user experience as well as streamlined performance. It has an 8Gb internal storage which can be upgraded via an 64GB microSD card. In addition to the good display and a recommendable performance the Infocus M2 also excels in the design department. The smartphone has a sturdy build and features a matte back which further enhances the ergonomics of the device. At the back the phone features an 8MP camera with flash and on the front another 8MP camera with flash.





HTC Desire 526G+

HTC Desire 526G+ is HTC's answer to the budget segment claims of other smartphone manufacturers. This unorthodox looking smartphone from HTC offers a nice blend of design and performance at a budget price. Right from the very moment you hold the device, the HTC Desire 526G+ feels very ergonomic. HTC has added the dual speaker grill at the front making the phone look good as well as quite different from the competition. The device feels sturdy and well built for the price. The smartphone offers a 4.7 qHD widescreen display at the front which has great viewing angles as well as decent sunlight legibility. Powering the device is a 1.7Ghz Octa-core MediaTek processor which is a good performer. Ranging from day to day task to processor intensive task like FHD video playback, graphic intensive games and web browsing are dealt with ease. The phone runs on Android 4.4 Kitkat out of the box with HTC's own Sense UI on top of it. The phone comes with 8GB internal storage and 1GB of RAM. It is also available with 16GB of internal storage option. At the back it has an 8MP camera with flash which can shoot videos at 1080p and at the front it has a 2MP camera. The phone features a 2000mAh battery which is good enough for day's worth of usage and then some more. Like every other phone in its segment the HTC Desire 526G+ offers a Dual-SIM capability.

Logitech Z906 THX certified sound system

Logitech Z906 is a premium surround sound system that can be used with your PC or as a Home Theater setup with a big screen TV. This THX certified system boasts of 500W of RMS power across its 5.1 channel configuration. The system supports digital as well as analog inputs, allowing you to connect multiple devices to the system. The control console that comes with the Logitech Z906 supports DTS and Dolby Digital 5.1 decoding, allowing you to enjoy digital sound in all its glory. Apart from multi-channel sound, the system also offers a '3D Stereo' mode that delivers surround sound effect in stereo mode. The Logitech Z906 comes with a remote and the satellites are wall mountable as well.



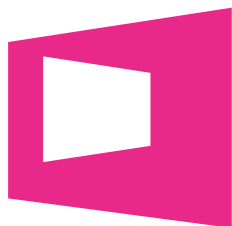
Seagate 500 GB Wireless Mobile Storage

Want a portable storage solution that also supports wireless transfers and access? The Seagate Wireless Mobile Storage should be your pick. The device supports simultaneous connection and streaming to 3 different devices, a big plus if you are planning to use the device as a portable wireless streamer. You can use Seagate's mobile app to manage and sync the drive with your mobile devices. Being a truly wireless device, the Seagate Wireless Mobile drive comes with a built-in battery, promising 6 hours of battery-life. The device can be charged via the micro USB port. And yes, you can connect the device via the supplied USB cable as well, the device supports USB 2.0 standard for transferring data via USB. Give that the Seagate 500 GB Wireless Mobile drive is a lifestyle product that goes well beyond the traditional design and aesthetics, Seagate has paid a lot of attention to the its design and finish. as a result you get a very cool looking drive that feels premium all-around and offers a choice of 5 colors to choose from.



snapdeal

**FIND ALL THESE GADGETS
ON SNAPDEAL AND SAVE BIG**



COMPUTEX TAIPEI

Shaping the Future!



See you **JUNE 2-6**

COMPUTEX TAIPEI, since its founding in 1981, has soared with ICT to become the hub of the industry to shape the future. This mega event is where ideas become products to inspire even greater advances.

 **Pre-register NOW!**

www.ComputexTaipei.com.tw

Venues

Taipei World Trade Center Nangang Exhibition Hall
Taipei World Trade Center Exhibition Hall 1 & 3
Taipei International Convention Center (TICC)



Organizers:  TAITRA  TCA

Tel: +886-2-2725-5200 Ext. 2634
E-mail: computex@taitra.org.tw
Fax: +886-2-2725-3501

GREED

For those who just want more than should be humanly allowed, we have enough to satisfy your hunger...

THIS MONTH: A SUPERCAR, GO PRO COMPETITOR, THE ALL NEW MACBOOK, and more...

TEMPTATION

If you're wondering what to do with yourself or how to spend some time getting cultured, this is for you...

THIS MONTH: CHAPPIE, KINGSMAN: THE SECRET SERVICE, LAND OF THE HEADLESS, and more...

DESIRE

Settings the stage for 2015

Every year, Barcelona plays host to one of the biggest tech shows in the world. The Mobile World Congress is where all the bigshots in tech gather, to tell us what they're planning next.



Yezz Project Ara Modules

The first smartphones under Google's Project Ara initiative are expected sometime this year. According to smartphone maker Yezz, they will be out in the next few months. The company showcased some of the prototype modules it has created for the Project Ara smartphone. The company also said that it has over 80 modules already under development for the first modular smartphone ever.

If you're unaware of the Mobile World Congress, then think of the Cannes Film Festival, but with tech instead of movies and geeks instead of celebrities. One of the largest tech events in the world, the MWC is usually the playground for the biggest technology firms to set things in motion for the rest of the year.

This year's event was headlined by the launch of the Samsung Galaxy S6, while HTC took the stage to unveil its HTC One M9 and a bunch of other gadgets. That's not the half of it though, smartphones are just a part of what happened at the MWC 2015. Google announced its plans to become a enter



the mobile service provider business, while Facebook was talking about drones.

In addition, OnePlus announced that it would be entering a whole new product segment, while Sony put off plans to launch the Xperia Z4

smartphone, going instead with the Z4 Tablet and M4 Aqua smartphone.

This time's Desire section is an ode to everything that happened, from the smallest to the biggest, and even the worst at MWC this year.

Android Pay



Unlike Apple Pay, Google's Android Pay isn't exactly something that you'll find in your phones. Instead, it is something that developers can build into their apps, in order to add support for mobile payments.

Cyanogen fans rejoice

Android ROM maker Cyanogen changed its branding and also entered into a partnership with Qualcomm. The company's ROMs will now be a part of the reference builds for some of Qualcomm's processors.

OnePlus' new product

OnePlus founder Carl Pei announced that OnePlus would be entering a whole new product segment in April this year. He ruled out the possibility of this being a tablet or smartwatch.

Qualcomm Snapdragon 820

This one comes with an in-built fingerprint sensor that in some ways could rival Apple's Touch ID Sensor. The Snapdragon 820 is yet to be seen in any smartphone or tablet, but it seems worth keeping an eye on.

AC 1900

Wireless Dual Band Gigabit Router

Archer C9

- **1900Mbps Simultaneous Dual Band**

Maximum Speed up to 600Mbps over 2.4GHz & 1300Mbps over 5GHz.

- **1 USB 3.0 Port and 1 USB 2.0 Port**

Convenient for users quickly sharing files over the network or the internet through the router's FTP server.

- **Beamforming Technology**

Locate your connected devices and boost wireless signal strength in those directions, delivering more targeted and highly efficient wireless connection.



Dual Band
2.4GHz+5GHz



N600+
AC1300



1GHz Dual
Core CPU



Gigabit
LAN Port



USB
3.0 Port



TP-LINK
Tether App.



AC1200

Wireless Dual Band USB Adapter
Archer T4U

TP-LINK India Private Limited

www.facebook.com/tplinkind

Website: www.tp-link.in



Why 802.11ac?



Archer C9
Details



Samsung Galaxy S6 and S6 Edge

Samsung finally listened to consumer demand and added premium materials to its devices.

Samsung's newest flagship devices were announced at the MWC 2015. The South Korean smartphone maker finally succumbed to popular demand, adding metal to its devices. The S6 and S6 Edge are Samsung's first all metal flagships. The plastic is not the only thing Samsung shed though, the two devices run on Samsung's own Exynos 7 Octa SoC and not Qualcomm's Snapdragon 810. In addition, they have 16MP cameras on the back, along with 5.1 inch 2k Super AMOLED displays. Of course, the S6 Edge also has the two edge displays on either side of it.

Unlike some of Samsung's older flagships, the company has a lot riding on these two. With the entry of companies like Xiaomi, the South Korean market leader has seen a massive drop in its sales. Hence, Samsung has a lot riding on the S6 and S6 Edge, making them its shot at redemption.

Samsung also displayed immense confidence on the Indian market, launching the devices in India on March 23, less than a



month after announcing them in Barcelona. Will the S6 and S6 Edge bring back the glory days for Samsung?

SPECIFICATIONS

Display: 5.1 inch QHD Super AMOLED | **CPU:** Exynos 7 Octa | **RAM:** 3GB | **Rear camera:** 16MP | **Front camera:** 5MP | **Battery:** 2600 mAh
Price: TBA



HTC One M9

If it ain't broke, don't fix it, that seems to be HTC's motto. The company unveiled the new HTC One M9, which is basically the M8 with newer hardware. HTC spoke at length about how passionate the company is about design and the intricacy in designing a phone like this, but we really wonder what it had been doing over the past year.

The HTC One M9 runs on Qualcomm's Snapdragon 810 64-bit SoC and has a 20.7 MP rear camera. HTC's 4MP ultra pixel camera has been put on the front of the device and it has the same 5 inch 1080p display as the M8. It has 3GB of RAM and runs on HTC's Sense 7 UI, layered over Android 5.0 Lollipop.

While we haven't reviewed the M9 yet, the device seems slightly disappointing thanks to the lack of innovation. We hope the pricing for this one will be good.

SPECIFICATIONS

5 inch FHD, Qualcomm Snapdragon 810 SoC, 3GB RAM, 20.7MP rear camera, 4MP ultra pixel front, 2840 mAh battery
Price: TBA

QUICK HEAL

Quick Heal®

Security Simplified

KHAREEDO

GAADI JEETO

CONTEST



*T&C Apply. | Contest valid only in India. (Except Tamil Nadu)

WE'RE BACK!

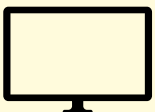
*Buy a Quick Heal Product
Win an Assured Gift* & a Chance to Drive Home a
FORD ECOSPORT!*

Contest valid from

10th Jan to 15th May 2015.

Buy a Quick Heal Protection for your PC, Laptop or Smartphone, & get an Assured Gift .

Assured Gifts*



3D LED/LCD TV



ACTIVA



LAPTOP



350CC BIKE



DIGITAL CAMERA



BACKPACK

And many more...

For more details, visit www.quickheal.co.in/contest

✉ info@quickheal.com ☎ +91 927 22 33 000

Lenovo A7000

Lenovo's budget phablet seems poised to take on the Redmi Note and Yu Yureka.

Lenovo seems to be following Xiaomi to the T. The company's A6000 sells through flash sales and has specifications that were once expected only from Xiaomi. It doesn't help that the A6000 sells exclusively on Flipkart, which is also Xiaomi's playground. Now, the Chinese PC/smartphone maker is entering the budget phablet segment as well.

The Lenovo A7000 was announced at the MWC and seems poised to take on the Xiaomi Redmi Note and Yu Yureka smartphones. The MediaTek octa-core processor doesn't quite get us excited, but let's hope Lenovo can make more of it than others have been able to. The device should be launched in India soon.

From the press images, the A7000 seems to be a 5.5 inch version of the budget A6000 smartphone. Well, as long as it can perform, no one really cares about the price right? Lenovo's bar design may be mighty difficult to deal with at that size though. Nevertheless, let's wait and watch.

SPECIFICATIONS

5.5 inch 720p, MediaTek MT6752 octa SoC, 2GB RAM, 8MP rear, 5MP front, 2900 mAh battery

Price: TBA



Lenovo Vibe Shot

The camera centric Vibe Shot is a more interesting device. Lenovo talked up the 16MP rear camera on this one and the overall design of the phone looks refreshingly new. For selfie lovers, there's also an 8MP front camera. Given the right pricing, this phone can do wonders for Lenovo.

What makes it even more interesting is that Lenovo has put in the Snapdragon 615 SoC on the smartphone. Going by what we saw in the Yu Yureka and the HTC Desire 820, we expect really good performance as well. It seems like the complete package from Lenovo.

Again, going by Lenovo's history, India should be amongst the first countries where this device will go on sale.

SPECIFICATIONS

5 inch FHD, Qualcomm Snapdragon 615, 2GB RAM, 16MP rear, 8MP front, 2900 mAh battery

Price: TBA

ROUTER CRAFTED FOR YOU

SOPHISTICATED DESIGN MEETS POWERFUL MACHINE WITH ARCHER C9.

We are living in an advanced world where everything is connected to the Internet. Every small thing needs wireless connectivity, be it your Laptop, Smartphone or even you Smart-watch. A Router, and in turn, Wi-Fi has become a basic need and strangely very few companies have mastered this very essential product category. One of such company is TP-LINK which has its presence across globe and is trusted for its offerings in networking products. Here is a new Pearl from their bag of jewels – the Archer C9.

Its smooth looks and the inherent power of the router is what sets it apart. The sophisticated design, gentle curves and remarkable quality crafted with purity, TP-LINK's all new Archer C9 brings advanced technology with a touch of class. The Archer C9 will perfectly fit in your home/office environment as it was designed with those needs in mind. Equipped with Beamforming Technology this router can locate where your connected devices are and boost the wireless signal strength in those directions – it's like Wi-Fi which follows you.

As a cherry on the cake, TP-LINK has also provided Tether APP support for Archer C9. This APP provides the easiest way to access and manage your router with your iOS and Android devices.

Let's say you want to set up parental control on your router. Just open the APP on your connected compatible device change it from there. Ever had that sneaking suspicion someone is hogging your bandwidth? Open up the APP and Tether will let you who is connected to your router and what their privileges are.

The Archer C9 distributes a massive 1900Mbps of bandwidth among your devices. This smart Next Generation Router provides you with the next generation Wi-Fi standard – 802.11ac, where 1300Mbps of it is spread out on Crystal clear 5GHz band and 600Mbps over the 2.4GHz band. Here 5GHz will take care of the Netflix and YouTube videos streaming, also you can pounce your enemy smoothly while playing online games, whereas 2.4GHz band will take care of your emails, browsing, surfing task so that no lag is experienced while processing both things simultaneously. So browser



mail, while your sibling plays online games and your mom watches videos on YouTube, all without any lag. Integrated Shield cover will take care of all.

Apart from all amazing offering this router also provides you with 1 USB 3.0 port and 1 USB 2.0 Port for storage and sharing. That means all your data can be shared with your family or colleagues from the router itself. The Archer C9 will act as your print server, media server, FTP Server or storage sharing.

If you want more superfast data transfer speeds, you can always hook up your device to the full shielded Gigabit Ethernet ports. With one Gigabit WAN port and Four Gigabit LAN ports you can go viral with speed up to 10X faster than fast Ethernet Connections.

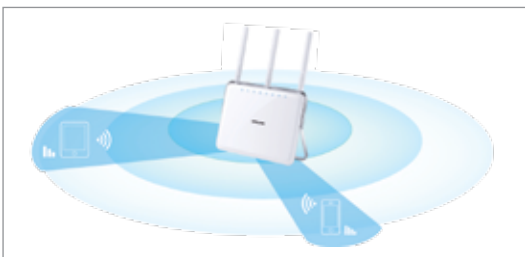
So how does the Archer C9 perform all of these tasks so effortlessly? The secret is the powerful chipset it uses. The

Archer C9 comes with an ultra-fast 1GHz Dual-Core CPU from Broadcom, so you can rest assured there is a powerful processor powering this machine.

What's more? You ask.

- Guest Network: provides secure access to guest sharing your Wi-Fi Network
- Parental Control: Allows parents or administrators to deploy restricted access for children or staff. With URL blocking, you can easily set up a black or white list to limit the level of web access.
- IPV6 Support: Future-proofing the network you are setting up today.
- Easy Setup: Quick and hassle free installation via the web configuration utility from any laptop, smartphone or tablet.
- Signal Rate: 5GHz: Up to 1300Mbps 2.4GHz: Up to 600Mbps
- 1GHz Dual Core Broadcom CPU: A great 'heart' for fast, stable performance with Wi-Fi
- Antenna: 3 Detachable Dual Band Antennas
- Dual USB Ports – 1 USB 3.0 Port + 1 USB 2.0 Port
- Beamforming Technology – Beamforming technology delivers highly efficient wireless connection
- Easy One touch WPA – wireless security encryption with the WPS button

You can find more details on <http://www.tp-link.in/>



Gionee Elife S7

The Gionee Elife S7 is slated to launch in India soon and is one of the slimmest phones in the world. The device is an upgrade to Gionee's earlier Elife S5.5 and S5.1 smartphones, but for some reason, Gionee hasn't opted for the Snapdragon 615. Instead, the phone comes with the same MediaTek MT6572 SoC as the Lenovo A7000.

The smartphone also has a 13MP rear camera and an 8MP front camera, which means Gionee may even sell this as its selfie offering. The pricing for the device is to be announced soon, but we expect something between ₹15-20,000.

It's not quite the most convincing smartphone that we've seen at the MWC this year, but Gionee seems to be confident of it. The phone will be launched in India in April this year.

SPECIFICATIONS

5.2 inch FHD, MediaTek MT6572 Octa, 2GB RAM, 13MP rear, 8MP front, 2750 mAh battery

Price: TBA



Microsoft Lumia 640

Microsoft has been pushing its Lumia line harder than ever before since completing the Nokia acquisition. The company seems to be betting on a strategy of comparatively lower priced devices, but with a lot of freebies in the form of Microsoft services. The Lumia 640 seems to be a quintessential affordable range smartphone and comes with a year-long subscription of Microsoft's Office 365 platform.

The device has a 5 inch display that sports a 720p resolution and the Windows Phone 8.1 operating system. The specifications look very similar to the Lumia 730, except that this one doesn't have a selfie angle attached to it. The device should sit pretty

somewhere between the Lumia 730 and the Lumia 830.

In addition to the above, the Lumia 640 is an LTE enabled smartphone, which has been missing in the Lumia line for a while.



BlackBerry Leap



BlackBerry continued confusing us all with a new smartphone that is apparently targeted at the younger population. Interestingly, the device runs on a Snapdragon S4 Plus processor, which is not even close to being the most powerful you can find. In addition, the device has a 5 inch 720p display and 2GB of RAM. There's also an 8MP camera on the back, accompanied by a 2MP shooter on the front.

APP WATCH

Indiaonline.in



IndiaOnline is a collection of resources, ranging from doctors near you to classified advertisements. It also consists of resources like news by Citizen Journalists, weather, events happening in your city etc. The interface takes cues from Windows Phone, with a colourful tile layout and looks pretty nice. According to the company, IndiaOnline.in is a collection of 350 user centric websites, combined into one useful resource. The app is currently available on Android only.

Android: <http://dgit.in/IndOnline>

Zebpay



Although India isn't quite big on Bitcoins right now, getting its first mobile Bitcoin wallet may get things moving. The digital currency has been in the middle of a lot of controversies. On the other hand, it has also received attention from nobel laureates. Needless to say, Bitcoins are a thing of the future. Zebpay's goal is to make owning and dealing in Bitcoins as simply as using any other e-wallet and the company has done pretty well in that respect.

Download (Android): <http://dgit.in/Zebpay>

More info: <http://dgit.in/moreinfo>

Marvel: Contest of Champions



This is Marvel's answer to DC's Injustice: Gods Among Us. The heroes are of course replaced by Marvel characters, but other than that the game mechanics are similar. That said, Contest of Champions allows you a few more combat options. In addition, there are features like Alliances that Injustice doesn't have. The game is updated regularly to introduce new characters and can make for a very good travel companion, especially for superhero geeks..

Android: <http://dgit.in/MarvelCOC>
iOS: <http://dgit.in/COCiOS>

Digit is hiring.

If you think you have what it takes to put words onto this page, write to us at editor@digit.in

Microsoft Lumia 640 XLL

Microsoft launches only the third Lumia phablet ever.

The Lumia 640 was accompanied by the larger 640 XL smartphone. This smartphone holds the same internals as the one mentioned above, but with a larger 5.7 inch display.

It's been a while since Microsoft launched a phablet into the market and it is good to see the company filling up its portfolio. The last phablets in the Lumia range were the Lumia 1520 and Lumia 1320. We quite liked both of those phablets, but of course, Windows remained a hitch for them. The OS has grown since then though and the 640XL may very well be a good addition to the Lumia range.

While the processor remains the same, the Lumia 640XL also has a 13MP rear and 5MP front camera along with a bigger 3000 mAh battery over the 640. The device should also be priced in the sub-20k segment, but going by Microsoft's pricing history, it's hard to be sure.

The Lumia 640 XL also comes with the bundled Office 365 subscriptions. This seems to be Microsoft's strategy. The company seems to be betting on the fact that Office and its services will be used by regular users. Microsoft is even making them available on Android and iOS gradually. There are only two possible reasons – either Microsoft is looking to draw users from Android to Windows



using these services, or the company is trying to generate profits through services and leverage that to build the Lumia line. Only time will tell what's what.

SPECIFICATIONS

5.7 inch 720p, 1GB RAM, Qualcomm Snapdragon 400, 13MP rear camera, 5MP front camera, 3000 mAh battery

Price: TBA



Sony Xperia M4 Aqua

Sony seemed to have made a last minute decision to not launch the Xperia Z4 smartphone at this year's MWC. Hence, the M4 Aqua is the beginning to the company's 4 series of Xperia smartphones.

The M4, like many of its predecessors, is waterproof. That said, unlike its predecessors, this is an IP68 certified device that doesn't require flaps to cover its USB port. Sony showed off the smartphone in Barcelona and should be bringing it to India soon.

The Japanese company announced an euro pricing that translates to around Rs. 24,000. This and the fact that it runs on the Qualcomm Snapdragon 615 SoC means that the M4 Aqua would be competing against the HTC Desire 820 and some other smartphones.

The company made no remarks on when the Xperia Z4 flagship would be announced, but we expect it sometime in the second half of the year.

SPECIFICATIONS

5 inch 720p, Qualcomm Snapdragon 615 SoC, 2GB RAM, 13MP rear, 5MP front, 2400 mAh battery

Price: TBA

डिजिट अब हिंदी में

देश का सबसे लोकप्रिय और विश्वसनीय टेक्नोलॉजी वेबसाइट
डिजिट अब हिंदी में उपलब्ध है। नयी हिंदी वेबसाइट आपको
टेक्नोलॉजी से जुड़े हर छोटी बड़ी घटनाओं से अवगत रखेगी। साथ
में नए हिंदी वेबसाइट पर आपको डिजिट टेस्ट लैब से विस्तृत गैजेट
रिव्यू से लेकर टेक सुझाव मिलेंगे। डिजिट जल्द ही और भी अन्य
भारतीय भाषाओं में उपलब्ध होगा।

digit.in
NOW IN HINDI



www.digit.in/hi
www.facebook.com/digithindi

डिजिट



Sony Xperia Z4 Tablet

While the Z4 smartphone may not have been ready for the MWC, the Z4 Tablet was. Sony has long stopped bringing its tablets to India, which means the Z4 Tablet may never see the light of day here either. That said, it is still a pretty impressive device.

The tablet runs on Qualcomm's Snapdragon 810 SoC along with Android 5.0 Lollipop. It also has a 10.1 inch QHD display and 8MP and 5MP cameras on the back and front respectively. The Xperia Z4 Tablet is also only 6.1 mm thick, which is the same as the iPad Air 2 by Apple. Unlike the Apple device though, the Z4 Tablet is lighter at 393 grams.

It's a pity that Sony doesn't sell its tablets in India anymore, this seems like a device we all would have loved.

SPECIFICATIONS

10.1 inch QHD display, 3GB RAM, Qualcomm Snapdragon 810, 8MP rear camera, 5MP front camera

Price: TBA

Sandisk 200GB micro-SD

Sandisk wasn't done with the USB Type C drive though. While the top mobile devices in the world today can only take SD cards of up to 128GB storage capacity, Sandisk took to the stage to launch a 200GB version, which is plans to sell for \$400. Yes, you read that right, this SD card can give you all of 200GB of extra space that you can carry around in your pocket.



Sandisk didn't give much information on how it achieved this though, but the 200GB SD card is the largest anyone's ever seen for such a small storage device.

Price: \$400

SanDisk USB with Type C port

If you've heard about Apple's newest Macbook announcement recently, you would perhaps be familiar with the new UBS-C port and all the controversy around it. Well, this 32GB flash drive from SanDisk is the only one that is capable of connecting to it without the need for an adapter right now. The company launched it at the MWC this year, perhaps in anticipation of the new Macbook.



SECURITY WATCH

India's requests more information about Facebook users



According to Facebook, data requests rose to 35,051 in the second half of 2014 from 34,946 in the first half. The social network blocked 9,707 pieces of content, about 11 percent higher than the first half. India made 5,473 requests and sought 7,281 users/accounts. Facebook produced some data for 44.69% of requests. 5,832 number of pieces of content restricted. "It's a challenge to maintain one set of standards that meets the needs of a diverse global community. For one thing, people from different backgrounds may have different ideas about what's appropriate to share — a video posted as a joke by one person might be upsetting to someone else, but it may not violate our standards," says Facebook in a blog post.

Pakistan cyber firm hacked computers of Indian bureaucrats



IT firm FireEye stated that Pakistan based Tranchulas cyber security firm, has been helping Pakistani government prepare for cyber warfare and has been sending

malicious emails to Indian government officials. The firm used terms like 'Devyani Khobragade', 'Salary hike for government employees', and 'Sarabjit Singh' in the subject line to entice government officials to open these mails. Once the attachment was opened, a malware would infect the computers and collect data and send it back to the attackers. The firm used a Pakistani based virtual service provider- VPSNOC, which leased US hosting services to control the attacks. FireEye has reported the information after a thorough two year long investigation.

Podec: First Trojan to trick CAPTCHA into thinking its human



Kaspersky Lab's security analysts have discovered first malware to successfully outwit the CAPTCHA image recognition system. The Trojan-SMS.AndroidOS.Podec has developed

a technique to convince CAPTCHA it is a person in order to subscribe thousands of infected Android users to premium-rate services. First detected in late 2014 and updated since then, Podec automatically forwards CAPTCHA requests to a real-time online human translation service that converts the image to text. It can also bypass the Advice on Charge system, which notifies users about the price of a service and requires authorization before payment. The Trojan's goal is to extort money from victims via premium-rate services.

LG Watch Urbane

The Watch Urbane could very well be what we've been looking for from smartwatches.

You know how all the big tech firms have been hiring assets from fashion or luxury brands recently? Smartwatches are a big reason for that. These wearables are as much about fashion, as they are about technology. LG's first attempt at a smartwatch wasn't the best, but this new one may strike the right chords.

The Watch Urbane is one of the best looking smartwatches till date, much better than the Moto 360. It runs on the Android Wear operating system and has a metal dial, which makes it look like traditional luxury watches.

LG recently showcased the Watch Urbane at the LG Tech Show in Delhi, announcing that the device should start selling in the country soon. The pricing is yet to be known though, but expect something around Rs. 20,000.

We had a few moments with the Watch Urbane at the Tech Show. Strictly from first impressions point of view, the Watch Urbane lives up to what you see in its press images. In addition, Android Wear seems a little smoother on the Urbane than what we saw in the Moto 360. All in all a pretty satisfactory smartwatch.



Price: TBA

REFRESHMENT FOR YOUR CAR



SERVO® Kool Plus - Triple Action Coolant

EXCELLENT COOLING EFFICIENCY | ALL-WEATHER PERFORMANCE | PREVENTS RADIATOR CORROSION



100% PERFORMANCE. EVERYTIME.

DESIRE

MOBILE WATCH

While the MWC was exciting, there were some other even more exciting developments in the Indian mobile market. Read on...



Xiaomi Redmi 2

Xiaomi updated its budget portfolio in India this month. The Redmi 2 was launched a few months ago in China and the company has wasted no time in bringing it to its second biggest market as well. If you've read our review, you would know that this is a device worth the money. At Rs. 6,999, the Redmi 2 is the new king of the budget segment a good upgrade to the company's earlier Redmi 1S smartphone.



Xiaomi does it with tablets this time

The best part about the Xiaomi Mi Pad is that it looks like an iPad and has specifications similar to the Nexus 9. It runs on a 32-bit Nvidia Tegra K1 SoC (the Nexus 9 has a 64-bit version) and boasts a QHD display. But Xiaomi is known to make such devices right? So, what exactly did it do? Well, the tablet costs only Rs. 12,999, something that has been unheard of till now. It's the kind of value that only Xiaomi has been known to provide and the tablet has no competitor in the market right now. We've been working on the review for a few days now and we're already drooling over it.

Moto E (2nd Gen) 3G

Motorola seems to be taking a different strategy in India this time, launching 3G and 4G skews for the second generation of its Moto E. It is still a pretty good smartphone, but loses out by a huge margin against the likes of the Redmi 2 and Lenovo A6000. The device doesn't seem to be aimed at the Tier I markets and Motorola is going to launch the 4G variant soon for that. The smartphone still costs ₹6,999, like its predecessor, but with an older generation processor, it just doesn't provide the value it used to. The only thing the Moto E has over its competitors is that it comes with Lollipop out-of-the-box.



Huawei's Honor brand kicks things up a notch

The Huawei Honor 6 was a gem of a smartphone, but the new Honor 6 Plus takes it to a different level. It borrows design elements from Sony's flagship Xperia smartphones and adds a bit of Huawei's own ideas to it. In addition, the Kirin 925 is a better performer than you would expect. It delivers performance similar to the Snapdragon 800, which is saying something. Price: ₹26,499

Which is the Best Engineering College for you?

Find out at **www.pickacollege.in**

Education experts and scientists from IITs, Stanford and MIT have joined hands to create India's first decision making tool to help students and parents choose the right college. We have evaluated more than 1000 engineering colleges based on location, program, employability and fees to rank them and help you pick the college that is best for you.

To search, select and compare streams & colleges visit **www.pickacollege.in**

Apple Macbook

Is it really that great?

Apple announced the all new MacBook early last month. It is not a replacement for the MacBook Air or the MacBook Pro, the new MacBook is an addition to the line of MacBooks, targeted at users looking for a compact, slim and light laptop with a ultra high resolution display. The new MacBook has a lot of segment firsts in terms of specs, features and design elements, so let's start with the basics. The new MacBook will be powered by an Intel Core M chip (14nm Broadwell platform). The Intel 1.1 GHz Core M processor used in the MacBook is made for hybrid devices and high performance tablets with fanless design, employing passive cooling techniques. The graphics on the MacBook is handled by Intel HD Graphics 5300, a very basic GPU that sits at the bottom of the latest Intel Core platform. The laptop comes with 8GB RAM by default and gives a choice between 256GB or 512GB of PCIe based flash storage. The laptop boasts a mere 13.1 mm in width and weighs 0.92Kg. Just to put things in perspective, the MacBook Air 13 weighs 1.35 kilograms and is 17mm thick. Take away the battery, the trackpad, the keyboard, monitor and a few other odds and ends and you're left with this – what Apple calls the Logicboard – the heart of the 2015 Apple MacBook (what you



see in the image alongside). Smaller, lighter than a Macbook Air, is the new Macbook Apple's attempt at sneaking in yet another device into your Christmas list and later on into a drawer you'll never open? Featuring a 12" retina display 2.5 GHz Intel Core M chip, 8GB of RAM, and a choice of up to 512 GB of SSD space and a battery that's expected to last 9 hours, the only downer is the fact that it's only got one port in all (including the one to charge it).

SPECIFICATIONS

Resolution: 2304x1440 | **PPI:** 226 | **CPU:** 1.1GHz |
RAM: 8GB of 1600MHz LPDDR3 | **Price:** \$1299

Koenigsegg Regera

We take pride in the things we do, so before we go any further, we would like to proudly announce that we can spell Koenigsegg even in our sleep. This proves double handy because they've introduced a new car and we're probably going to be telling everybody about it. But before we get into that let's revisit some of the things we know about the last supercar that came from the their stables, the Koenigsegg One:1.

They called it the world's first mega car. Capable of going from 0-400kph in 20 seconds (and back to 0 in 10), this car's name is derived from the holy grail of car design – a 1:1 power-to-weight ratio. Koenigsegg have somehow extracted 1360PS from a V8 and set it to propel a (you guessed it), 1360Kg car. In other words, they've built a production car that generates 1MW power. A car that produces this much power will struggle harder to remain on terra firma right? A slew of fancy aerodynamics were built in to generate



over 600Kg of downforce to keep the One:1 planted on the ground.

Now lets talk about Koenigsegg's latest release. They seemed to have taken One:1 and built on it further. Named the Regera, this is the latest entrant to the three-way hyper-hybrid fight between Ferrari, McLaren and Porsche. This 1500 hp monster has an 1100 hp V8, a 700 hp electric motor and no gearbox. With power sent to the wheels through its patent-pending KDD or Koenigsegg Direct Drive system, this is the

first car powered by internal combustion not to feature a gearbox. While Koenigsegg have been famous for making track monsters, this car however, is meant to give you a comfortable, luxurious ride while still trying to keep your face off with the gas pedal buried in the carpet.

SPECIFICATIONS

Weight: 1,633 kg | **Top Speed:** 410 km/h | **0-100 km/h:** 2.8 sec | **Price:** \$1.9 million | **Engine:** 5.0 litre twin-turbo V8

TO FOLLOW THE LATEST IN TECH,
FOLLOW US ON...

The Facebook logo, consisting of the word "facebook" in white lowercase letters with a registered trademark symbol, enclosed in a blue rounded rectangle with a glowing blue border.

facebook.

digit.in/facebook



Mad Catz S.U.R.F.R.

After snatching the breaths of mobile gamers away during the launch of the L.Y.N.X. 9, Mad Catz have launched yet another controllers for smartphones and this one comes with a keyboard too. Dubbed the S.U.R.F.R., Only slightly larger than the average flagship smartphone of today, the controller has a mouse pointer input, trigger keys, analog controllers and dedicated media keys built in along with palm rests. Mad Catz believe that the S.U.R.F.R. will be the perfect tool to fully experience modern smartphones as they gravitate towards becoming a user's primary interface connected to their digital lives. Expect it to retail for around ₹5,000 (\$79.99).

BlackBerry P'9983 Graphite

Designed by Porsche and built by BlackBerry, the P'9983 is the third phone to come out of this match made in mobile phone heaven. While the first phone was a BlackBerry Bold in better threads, the second was one riding the touch-screen wave, the third harked back to the original BlackBerry design of a small-ish screen and a nice qwerty keyboard. The fourth to come out of this partnership is the third, only with better styling. Available with "graphite coloured elements" and a back wrapped in leather, its innards sport the same 1.5 GHz processor, 2GB of RAM, an 8 MP and a 2MP snapper at the back and front (in that order) and 2100 mAh battery. Costing roughly ₹1,22,250, it's available at Porsche Design stores everywhere.



Nikon D7200

Travel photographers rejoice! Nikon has just launched its latest APS-C Camera, the D7200. Meant to replace their prosumer flagship, the D7200 is unchanged in appearance, but on the inside gets a new EXPEED 4 chip that 30 percent faster than its predecessor in the D7100. Furthermore, the new camera also comes with NFC and Wi-Fi allowing you to back up your photos on the go and even share them on social media. It's got the 24 Megapixel sensor, a burst mode of 6fps and a 51 point AF. While pricing details haven't be disclosed yet, it will be available for purchase this month with a sticker price of around ₹74,300 (\$1,200) for just the body and ₹1,05,300 (\$ 1,700) if you want it with the DX 18-140 mm lens.



Aeromobil's flying car service

We all don't get wiped out by global warming and rising sea levels by 2017, there's something really cool that's worth looking forward to. But, it'll cost about as much as a supercar. Built by a company based out of Slovakia (Yes, it's a country. Look it up) Aeromibil has just unveiled its prototype flying car. Intended to seat two, the roadster has a conventional engine and runs regular unleaded petrol. With a flying range of about 700 km, the car/plane only needs 200 metres to land. Sadly, you need a pilot's license to fly this baby.

Xiaomi YiCamera

A go pro killer?

They killed flagship phones, made security cameras and even made LED lightbulbs and now, China's answer to Apple, Xiaomi has diversified yet again and this time have taken on GoPro's entry-level Hero. Named the YiCamera, this \$64 action cam comes with a waterproof housing, a 155 degree wide angle lens and a Sony sensor that shoots 1080p videos at 60fps. Not only does it look like the \$130 Hero, it also has a similar battery capacity, similar levels of water resistance and offers 64 GB of space – double that of the GoPro.

SPECIFICATIONS

Chipset: Ambarella A7 | **Video Resolution:** 1080P (1920 x 1080) | **Weight:** 72 grams
Wi-Fi: Connectivity upto 100 meters |
Memory: Supports upto 64GB SD Card



Computing Solutions in Most Economical Way



Ideal Solutions for all Verticals



Education



Corporate



BPO/KPO



Manufacturing



Healthcare



Government

RDP Workstations Pvt. Ltd.

8-2-248/B/32, Sri Lakshmi Arcade, Journalist Colony, Banjara Hills, Road No-3, Hyderabad-34, TS, India . P: 040-6457 1110

Free Demo -1800 200 2444

www.rdp.in

Land of the Headless

A book by recheché science-fiction writer Adam Roberts, *Land of the Headless* makes an interesting read. In a theological, scientifically advanced universe, the book follows the journey of Jon Cavala - a poet who was beheaded and exiled (yes, in that order) for a crime he didn't commit.



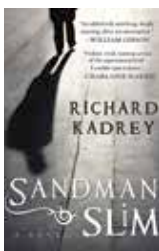
The Gun Seller

From the man who spent 8 seasons playing a crabby know-it-all doctor with an addiction to vicodin, comes a comedy noir novel about Thomas Lang - a mercenary with a heart. Hugh Laurie at his best.



Sandman Slim

He's back from hell and he's very, very steamed. Richard Kadrey's 'Sandman Slim' series follow the recently resurrected James Stark - a magician who gave Azazel the slip to return to Earth and take revenge on his girlfriend's killers.



MOVIE Chappie

Goodbye, Elysium!

After the colossal waste of effort that was *Elysium*, the District 9 director Neill Blomkamp entered this movie guns blazing.

Chappie is essentially a film about a robot's brush with humanity. Yes, this trope has been covered time and time again in movies over the years. Even science-fiction shows have given digital humanity their own little homage. Despite the borderline cliché it is, *Chappie* grabs the concept by the gears that are its cahunas and tears it a new one.

Sure, the film has its holes, but given the universe created, most of them can be explained away with little effort. *Chappie* shows an influence ranging from *Robocop* (the original one from the 90's) and *Escape From L.A.* to *Bicentennial Man* and *I, Robot*.

The existence of Hugh Jackson and Sigourney Weaver seems unjustified for anything other than to give the film street cred. Blomkamp's golden boy, Sharlto Copley returns, however, to try and outdo Hugo Weaving and Kevin Spacey and bag the 'Prominent Faceless Roles of the 21st Century' award. Oh and Dev Patel seems to be



channeling Neil Sampat. Move on, NRI. The screen time given to the South African rappers Ninja and Yolandi Visser is surprising, but not unwelcome. They fit into the story, and fulfill their roles.

The movie's characters were well-fleshed out throughout the movie. The writing was solid and reliable, and the story holds you emotionally hooked...

...until the last 15 minutes of the movie, when the excrement hits the rotors at full speed and creates a splatter you can't clean up.

It's not the worst climax you would have seen in a movie (especially if you saw 'Edge of Tomorrow' last year) but it does leave you with a 'What the Fudge-cracker?' at the end of the show after watching *Rambo* and *Future Cop L.A.P.D* fight it out and see Dev Patel's makeover scene.

All in all, a fun watch, despite the bad climax.

Well-written, well-directed and even a great re-watch.

Prakrit Dhondiyal



Marvel's Daredevil
The much awaited TV show is here! Netflix's rendition of *Daredevil* promises to wipe out the Afflict-tion out of our systems for good! Check out the latest trailer at: <http://dgit.in/1EE5NMK>



Community Season 6
The last season before the promised movie, students of Greendale High return to take you for a ride down the road to geekdom one last time on Television. Don't miss it. Go Human Beings!



iZombie
From the Writer/Director that brought you *Veronica Mars* comes *iZombie*. A show about an infected girl who works as a coroner to get a steady supply of brains, and solve murders on the side. A bit too 'Tru Calling', the show does seem to have some potential.



The Ring Cam

With wedding season in the air, here's an Engagement Ring Box with a Built-In Camera for Capturing that moment when you propose to 'the one'.

<http://dgit.in/1FSTTn>



The Bezeless Smartphone

The bezeless smartphone by LeTV looks beautiful and oh so gorgeously impractical. Rich geeks: Go crazy!

<http://dgit.in/1BoEZ1h>

MOVIE

Kingsman: The Secret Service

Manners maketh British Spy Kids

Walk into Kingsman with zero expectations, and you will have a blast. The trailer of the film leaves a lot to be desired, but the film goes the whole mile.



The star-studded cast includes Colin Firth, Michael Caine, Mark Strong and a very surprising role played by a lispy Samuel L. Jackson. Even Mark Hamill and Jack Davenport play small cameo roles. The script draws from the simple classic spy stories - boy loses way, boy meets life-changing mentor, villain plots to rule world, boy beats villain with mentor's hi-tech umbrella.

The movie's built on formula and backed by some excellent camera work, good visual styles, beautiful editing and a tight script. The director, Matthew

Vaughn (of Kick-Ass fame) brings his own little touch to the table with some well-timed action and neatly-shot gore. The actors do the film justice. The movie is based on a Graphic Novel series and is one of those rare cases when the movie surpasses the book.

Prakrit Dhondiyal

Hot and boxed in?

Facing the dreaded summer afternoons can be a daunting prospect. It's always nice to get your mind off the heat by engaging in some indoor activities.

If you're bored with hours of gaming and are looking for some other geeky things to do in your free time, here are a few suggestions:

Mahayoddha

Dungeons and Dragons is an expensive piece of geek history. For something a little more local, give Mahayoddha a whirl.

This is a card-based battle game that digs its roots in ancient Indian mythology. This Kickstarter funded project should keep you and your friends occupied for hours. Available online for a reasonable price of ₹1,500.

Build a Rube Goldberg Machine

It's always fun to use regular everyday items to build your own little Rube Goldberg Machine. There are several basic tutorials available online for the same.

To get you on the right track, check out <http://m.wikihow.com/Build-a-Homemade-Rube-Goldberg-Machine> and start building your own at home. Maybe to dispense ice cubes?

Ice Cream Sandwich, anyone?

Cold stuff always hits the spot in the sweltering heat. Take some time to make your own stockpile of ice cream sandwiches. Remember: it's always easier to to if you can order up a few litres of liquid nitrogen.

One-stop insta-freeze. And boatloads of fun. Even if liquid nitrogen eludes you, there are more conventional ways of making them. Check out <http://busycooks.about.com/od/frozendessertrecipes/r/icecreamsandwic.htm>

**Online transaction
mein fraud se darte ho?
Toh mera laptop le lo.**

Fraud-proof hai! **Kaise? Aise!**

For more details, visit: www.quickheal.com/totalsecurity



Quick Heal

Total Security with

Safe Online Transaction

Geek life

Everything you need to know about the various players in the Virtual Reality space



Amazing cargo plane concept

This futuristic concept of a supersonic cargo plane by the Russians will blow your mind. Read more here: <http://dgit.in/FutureCargo>



Withings Home

Unlike most smart home monitors, the Withings Home goes the extra mile by claiming to offer you something uniquely different that no other device can match up to. Broadly a home monitoring system, the Withings Home is similar in size to the JBL Pulse or Charge speakers. It has a 5MP CMOS sensor camera that can record and live stream 1080p HD video. It has a 135-degree wide viewing angle, nightvision mode, and two digital microphones to record video. But what sets it apart from other home monitoring devices is its ability to assess and calculate real-time air quality and find out just how polluted the air inside your house really is. Seeing how India's major cities are struggling with rising air pollution woes, this sounds like a good device to monitor your home's pollution levels. This sells for US \$199.95.

Drooling your way to a smarter home



Haiku with SenseME

It's easy to imagine a smart, sensor-equipped air conditioner that intelligently raises or lowers temperature. But an electric fan that does all of this and more? Yeah, this is no joke. Check out the Haiku SenseME ceiling fan, which is head and shoulders above any other home fan you've encountered. The Haiku (with SenseME technology) has sensors built-in which detects when people enter or leave a room (thereby switching itself on or off). It also monitors the room's temperature and humidity levels, learns to adjust to your preferred fan speed choice, and when paired with an app on your smartphone, you can do all sorts of customizations with it – adjust rotation cycle, turn on or switch off the fan remotely, make the fan inaccessible, and do more.



All about the MacBook

Read this to know all about Apple's latest super-slim 12-inch MacBook and see what you get for \$1,299 http://dgit.in/Ohh_Mac



Drones allowed

The FAA has finally granted Amazon the permission to fly its experimental delivery drones in daytime <http://dgit.in/Droned>

Drool maal

Petnet SmartFeeder

Another step towards a smarter home is to go beyond just caring for your family members, but also widening the envelope to invite your pets to the benefits of a digital life. That's what SmartFeeder intends to do. The Internet-connected, app-driven pet feeder aims to take the guesswork out of feeding your pet, by allowing you to set meal times and portion control in real-time through your smartphone or laptop from anywhere in the world. You can even control food dispensing speed, inventory of food, and battery status, not to mention your pet's daily calorie count, to let you stay on top of your pet's diet in a convenient and fuss-free way.



Netatmo Welcome

This is a great smart home monitor. The Netatmo Welcome comes with an alert and monitoring system that relies heavily on face-detection monitoring. The device comes with a Wi-Fi enabled camera built-in (with a 4MP video sensor, capable of capturing Full HD video), and it has a motion detector that senses movement. The Netatmo Welcome is programmed to identify faces (even in nightvision) and create groups of people (such as family members, for instance). And the biggest thing about this device? Its ability to alert you instantly if it detects anyone who's a stranger. With companion Netatmo Welcome Tags (which are intelligent sensors), you can be alerted of a break-in before it actually occurs (by sensing unnatural vibrations, movement). And all the data it records is secured privately and locally, with only triggered alerts going on cloud. The price of this device is still not available, as the product is slated to launch in the next few months.

Goji Smart Lock

With smart locks, the era of good old lock and keys is finally on its last leg, and say goodbye frantically digging in your purse for your key bunch. With Goji, the adoption of smart locks in every household couldn't be more easier. Easy to install, the Goji Smart Lock is up and running in no time. It can take pictures of people at the door and email it to you in real-time, anyone with a smartphone can be given access to your home by creating customized keys for a particular date or time, and the lock also supports Bluetooth-enabled electronic fobs (the kind used in car keys), allowing you to lock or unlock your main door with just a press of a button (minus your smartphone). And if technology fails you, the lock comes with two sets of metal keys for old-fashioned barrier access.



PAISE BACHHAO OFFER

SAVE MONEY BY SUBSCRIBING
TO THESE OFFERS



3
Years

COVER PRICE RS. 7500/-
YOU PAY RS. 4999/-
SAVE
RS. 2,501/-



1
Year

COVER PRICE RS. 2,500/-
YOU PAY RS. 1,699/-
SAVE
RS. 801/-



6
Months

COVER PRICE RS. 1,250/-
YOU PAY RS. 929/-
SAVE
RS. 321/-

MAGAZINE - ONLY PACKAGE
(Without FastTracks & DVDs)

1 *Year* COVER PRICE RS. 1,500/-
YOU PAY RS. 999/-
SAVE RS. 501/-

ANNIVERSARY EDITION TRIAL PACK
(With FastTracks & DVDs)

3 *Months* COVER PRICE RS. 650/-
YOU PAY RS. 499/-
SAVE RS. 151/-

WHY
SUBSCRIBE
digit

DOORSTEP DELIVERY AT NO EXTRA COST
GUARD AGAINST FUTURE PRICE INCREASES
FREE DVD REPLACEMENT GUARANTEE
EXCLUSIVE OFFERS FOR SUBSCRIBERS

GIFT PAAO OFFER

CLAIM GREAT GIFTS BY
SUBSCRIBING TO THESE OFFERS



3 Years

COVER PRICE RS. 7,500/-
YOU PAY RS. 6,999/-

ASSURED GIFT

PORTABLE 3G/4G WIRELESS
ROUTER (TL-MR3020)
WORTH RS. 2,599/-



1 Year

COVER PRICE 2,500/-
YOU PAY RS. 2,500/-

ASSURED GIFT

NOKIA BLUETOOTH
BH110U WORTH RS. 1,099/-



6 Months

COVER PRICE RS. 1,250/-
YOU PAY RS. 1,250/-

ASSURED GIFT

ANTI-RADIATION 3.5 MM HEADSET
FOR YOUR MOBILE WORTH RS. 999/-

1 YEAR OF DIGIT SUBSCRIPTION GIVES YOU

1000+
PRODUCTIVE
REVIEWS

600+
PROBLEM
RESOLUTIONS

500+
TIPS &
TRICKS

200+
GB OF SOFTWARE
& GAMES

15+
FAST TRACK
BOOKS

FOR MORE SUCH EXCITING SUBSCRIPTION SCHEMES,
PLEASE REFER TO THE ATTACHED SUBSCRIPTION
FORM OR VISIT digit.in/subscribe

WE ACCEPT MAJOR CREDIT CARDS | DEBIT CARDS | NET BANKING | CASH CARDS |
MOBILE PAYMENTS (SBI-PAYMATE) | WALLETS (PAYTM AND MOBIKWIK)

ON COVER PRICE*

digit
MEGA
Subscription Offer



OFFER EXPIRES ON
30th APRIL 2015

ACT NOW

SUBSCRIBE ONLINE AT
www.digit.in/subscribe

OR

SMS **DIGIT SUB** TO
92200 92200

FOR QUICK CUSTOMER
SERVICE

EMAIL US AT help@digit.in
OR

CALL (022) 678 99 678



Curiosity update

NASA's Curiosity rover on Mars has obtained samples containing nitrates that are necessary for life to exist <http://dgit.in/CurNit>



Acer Revo One RL85

Seen first at CES this year, the Revo One RL85 from Acer is a tiny PC primed for home entertainment <http://dgit.in/RevoOne>

VR Headsets: Blurring the line between fantasy and reality

Virtual Reality shows real promise with the devices that are currently under development. Let's take a look at the ones that are betting big.

Elroy Desmond
readersletters@digit.in

Man is forever searching for ways to enhance his perception of reality and escape inherent physical, economical, and social limitations. Who among us would not want to experience the rush of adrenaline when doing a barrel roll in a fighter jet, the sense of trepidation when spelunking about uncharted caves in search of ancient relics, or the heightened feeling of unparalleled awe when floating in outer space? With the magic of virtual reality, such scenarios are slowly becoming a possibility in the near future.

Much of the credit must be given to pioneering devices such as the Oculus Rift, which with its complete visual immersion, 360-degree head-tracking, and comprehensive open-source support, brilliantly demonstrated the enormous potential of VR headsets in gaming and multimedia. Although the Oculus Rift did enjoy most of the acclaim for being the first device to bring VR to mainstream technology, bigger players such as Sony, Samsung, HTC, and Microsoft soon realized the potential of this nascent industry and have now introduced similar devices to compete for sales in the VR device market. Furthermore, with Facebook recently acquiring Oculus for



The future of gaming

a whopping \$2 billion, other companies will be forced to increase funding for their own VR devices, a win-win situation for the consumer.

Virtual Reality Headsets 101

Mainstream VR headsets follow a basic design standpoint: a hard plastic body, which is used to house the motherboard and processor, display, viewing lenses, and in some cases, an audio module and a camera. All these components are interfaced with a secondary device such as a PC or smartphone, which is used to process the game or virtual environment. Coupled with advanced features such as 360-degree head tracking, sensors such as gyroscopes and accelerometers, and high-definition 3D-audio, the final product is a device capable of generating fully immersive 3D environments.

While each VR headset does have its pros and cons, there are some common attributes that determine the overall VR experience. Parameters such as display type, screen resolution, refresh rate (or maximum framerate), field of view (FOV), and input latency can vary immersiveness and responsiveness, while design, build quality and ergonomics can influence comfort and usability. Of course, there's only so much that can be summarized in such a short explanation. Let's take a more detailed look at the devices that might soon become electronic mainstays in our households.

The Oculus Rift

Ever since its humble beginnings as a Kickstarter campaign, the Oculus Rift has been synonymous with VR headsets. The device has come a long way since



OCZ Vector 180

Toshiba just let loose their new flagship 6Gbps SSD – the OCZ Vector 180 featuring a Barefoot 3 controller <http://dgit.in/BareOCZ>



Kurganets BMP-25

A new armoured prototype Russian infantry fighting vehicle has been spotted at a parade rehearsal <http://dgit.in/ArmaRus>

Geek life

the clunky offering of its first prototype, the Developer Kit 1 (or DK1), which was followed by improved versions such as Crystal Cove and DK2, with better technical specifications and optimized design and ergonomics. In the heart of the device is housed an ARM processor and collection of chips used to control the LEDs and the “Adjacent Reality Tracker”—which in essence is a magnetometer, a gyroscope and an accelerometer, all used for achieving accurate head tracking in terms of pitch, roll, and yaw.

For video input, the Rift uses an HDMI cable, while a standard USB 2.0 cable is used to power the device and interface it with a PC for updating firmware, analyzing stats and other geek-related uses. The headset comes with a built in microUSB port, giving you the option to potentially connect a controller, a USB headset, or even a USB-powered neck massager for those extended Saturday night gaming sessions (Goodbye, social life!). The headset is strapped onto your head via vertical and horizontal straps, with the input cables attached to the uppermost one.

The latest version—aka Crescent Bay—offers reduced weight, an inbuilt audio processor (previous versions required the developer to implement their own audio module), and tracking LEDs in the back of the headset that now allow for 360-degree head tracking. This version also supports movement tracking at a very high polling rate of 1000 Hz for truly smooth VR head-turning. All of this is output on a pair of 1920 x 1080 HD AMOLED displays

(same as those used in Samsung’s Galaxy Note 3) at a smooth refresh rate of 90 Hz, which is a major factor for minimizing motion sickness.

One major improvement that Crescent Bay can boast of over previous Rift versions is the integration of Head-Related Transfer Function technology (HRTF) in the official Oculus Audio SDK. In their words, “HRTFs simulate the changes to a sound when it reaches your head from a point in space [...] by referencing data that represents changes that would happen to a sound coming from that direction.” In simpler terms, the technology can determine the sound to be generated in advance, thus playing it at a lower latency for a smoother 3D audio experience. Unfortunately, despite such progress, Crescent Bay will not be the consumer edition of the Rift. Expect the final version to have additional improvements and possibly even a wireless version.

HTC Vive

While Oculus seems set to make the biggest dent in the upcoming VR market, it is in no way going to do so unopposed. By collaborating with the likes of PC gaming giants Valve, HTC have shown that they mean business with the introduction of the HTC Vive. While they may have taken heavy inspiration from Crescent Bay in terms of design and specs, HTC and Valve have more than a few tricks

up their sleeve which should give the Vive an edge over its competition.

For one, HTC boast that the headset will offer unprecedentedly low levels of latency as well as super smooth 360-degree head movement, along with the ability the walk around in a 15 x 15 square feet area,



PC gamers will be hoping Valve’s reputation pays off

making for exceptionally immersive VR with unparalleled levels of maneuvering freedom. However, the one exceptional (alleged) selling point of HTC’s Vive is their claim that the final version will never induce motion sickness. In terms of VR headsets, this is quite a tall claim to make as quite a few first-time users of other VR headset complain about queasiness and minor headaches brought about by low framerates and high input latency. Furthermore, the device will be powered by SteamVR, which should be a game-making offering backed by Steam’s 125 million strong user base and Valve’s esteemed reputation for making excellent gaming experiences.

Specifications-wise, the Vive offers two 1200 x 1080p HD displays, with a maximum refresh rate of 90Hz. The integrated accelerometer, gyroscope and laser positioning system allows for highly accurate head tracking: up to one-tenth of a degree in any direction. The “contextually aware controller” (better known to most as Valve’s Steam controller) it comes with should allow you to intuitively move about and interact with objects in the virtual world.

Unlike Oculus Rift, HTC and Valve have a proper release date set at Christmas 2015. In fact, should HTC beat Oculus and others to the punch, they have a good chance of capturing a sizeable portion of VR headset sales.



The device that started it all



Fotonica

In for some really trippy fun? Then download and play Fotonica, an interesting new running game <http://digit.in/Fotoni>



DDR4 3400MHz Memory

Corsair recently announced their Dominator Platinum DDR4 3400MHz RAM made for Gigabyte X99-SOC Champion motherboard

WHAT HAPPENED TO GOOGLE GLASS

Google's first and most promising pet project—equally loved and maligned by the general public—has seen development stall over the past year. The technology showed a lot of promise, and the dev community reciprocated its support by buying tens of thousands of the Explorer Edition version — a great feat considering its jaw-dropping price of \$1,500 US. However, technical limitations and an inflexible price saw sales drop at an alarmingly consistent rate. This eventually led to stagnation in the development of apps, and support that remained (if any) seemed to be owing to a direct affiliation with Google. While the



company insists that it is still committed to Glass, they seem to have retreated to the drawing board for a more successful second attempt.

the other VR headsets in the list, the Gear VR does not have its own dedicated display and requires the use of a Galaxy Note 4 or Galaxy S6. However, this does give it a maximum resolution of 2560 x 1440p, which is the best display on any single screen VR device.

Samsung has ensured a wealth of content for users to enjoy, with support for numerous apps and games—a few such as Temple Run VR, Herobound, and The Room already have full Gear VR support—and a curated collection of 360 degree videos and movies to enjoy. The novelty of watching 3D movies in the cool Oculus Cinema (a VR 3D cinema hall) may soon wear out though, so make sure you have a good collection of movies and games to last you. Samsung's Milk VR video service has a regularly updated collection of 360-degree videos, although this service is currently only available in the US (surprise!).

The device is easy to setup and comfortable to wear, even for longer periods of use. The smartphone can be easily slotted into the device, and the controls on the headset are intuitive and make for hassle-free operation. Only main point of contention may have to be its price point. At \$200 US, it is not exactly

Sony Morpheus

Sony's Project Morpheus first turned heads during GDC 2014 when it gave PlayStation owners the chance to join the VR party. Unlike the Oculus Rift and HTC Vive, the Morpheus of course exclusively supports the PS4. However, PS4 interfacing currently requires a secondary box that connects via USB and HDMI. It also allows you to hook up a secondary display, which we can only presume you would want to use



PS4 owners can rejoice

to show off your VR experience to your friends. Sony has not yet ruled out the possibility of a wireless VR headset, but till then PS4 owners will have to make do with the cumbersome wired setup.

Sony upgraded the display of the Morpheus from 5 to 5.7 inches for a whopping 100-degree FOV, so you can catch zombies creeping up on you even from the corner of your eye. It uses a 1920 x 1080p display, split for each eye at 960 x 1080p, giving the Oculus Rift and Vive a slight edge over

in terms of display resolution. However, the Morpheus draws ahead of the curve with its silky smooth refresh rate of 120 Hz, which should guarantee some hyper-realistic animations and video imagery.

Like Vive with its handheld controller, Morpheus attempts to incorporate User-VR interaction by means of the Sony Move controller, which should add a new dimension to VR gameplay with the ability to emulate gun mechanics, intuitive handling of in-game objects, and complete freedom of arm movement with appropriate visual feedback. All of this translates into a more authentic and immersive VR gaming experience.

Unlike its competitors, Morpheus uses the Sony PlayStation Camera for 360-degree tracking as the camera can accurately detect the back of the subject's head. Tracking is performed at a polling rate of 1,000 Hz, which when coupled with the 120 Hz framerate, definitely ensures a smooth transition

between frames. Hopefully, Sony will follow through on its mid 2016 release date, otherwise PS4 owners are in for a long and painful wait for VR.

Samsung Gear VR

If all this talk and discussion about virtual reality has got you all excited, it must be infuriating to realize that almost none of the above devices are commercially available. Samsung comes to the rescue with its much hyped Gear VR. Unlike



Virtual reality that you can experience now!

a cheap option, especially for a device that requires a \$650 secondary display. While there are cheaper alternatives in the market for display-less VR headsets (e.g. Carl Zeiss VR One and Archos VR Headset), it makes sense to buy this if you already own a Note 4 or Galaxy S6.

Honorable Mentions

While Oculus, Sony, and HTC have clearly stolen the show when it comes to VR headsets, the lucrative nature of this



Surface Pro 3 at a discount

Right on the heels of rumours about Microsoft's Surface Pro 4 tablet, the Surface Pro 3 is now available on sale



Xiaomi Mi TV 2

Xiaomi announced the launch of its affordable new 40-inch Android-powered smart TV for \$320
http://dgit.in/Xiao_TV

Geek life

Features	Oculus Rift	HTV Vive	Sony Morpheus	Samsung Gear VR	Razer OSVR
Resolution	1920 x 1080p (per eye)	1200 x 1080p (per eye)	960 x 1080p (per eye)	2560 x 1440 (combined)	1920 x 1080p (combined)
Display type	2x AMOLED displays	AMOLED display	LCD display	AMOLED display (requires phone)	AMOLED display
FOV	100° (Horizontal)	NA	90° (Horizontal)	96° (Horizontal)	90° H x 90° V
Display Refresh Rate	75 Hz	90 Hz	120 Hz	60 Hz	60 Hz
Sensors	Gyroscope, Accelerometer, Magnetometer	70 sensors for enhanced tracking	Cameras for tracking while moving	Accelerometer, Gyroscope, Geomagnetic, Proximity	Sensor hub with integrated accelerometer, Gyroscope and compass
Integrated Audio	Headphones	Headphones	Headphones	Headphones	Requires additional module

fledgling technology has seen a number of tech companies throw in their own VR solutions. The closest in terms of pure performance would have to be Razer's Open-Source Virtual Reality platform, aka, the Razer OSVR. Although the Oculus Rift is open source, Razer went one step further and made even the hardware open source — you can 3D print your

own dev kit as the files for it are available online.

Devs can use OSVR tools to develop platform-independent VR games and apps. Razer claims its main aim is to make VR more developer friendly. As a result, a number of video game studios and game engine developers, including big names such as Ubisoft, Untold Games, Virtuix, Unity 3D, and Unreal have pledged their support for the platform, ensuring a glut of potentially groundbreaking games to soon follow.

Microsoft is not one to simply watch the VR showdown from the sidelines. Their recently unveiled HoloLens integrates VR with augmented reality by allowing users to view and interact with holographic 3D projections set against a real-world envi-



Microsoft HoloLens



Razer OSVR

ronment. Featuring a lightweight, wireless headset that has a suspiciously uncanny resemblance to the RoboCop helmet, the HoloLens consists of a pair of lenses, a depth camera, a pair of speakers, and a translucent display used for the projected holograms (similar to what we've seen in Google Glass). The depth camera (in actuality, it is a group of cameras along the front and sides) is based on the same technology powering Microsoft's Kinect camera. It has a potential FOV of 120 degrees both horizontally and vertically and can track your movement as well as objects in the surrounding, including your hands, which makes potential applications endless. However, the project is in its nascent stage, and once a developer model is released, we can make a more informed judgement.

It looks like the contest for best VR headset will be a closely fought one, with Oculus, Sony, and HTC, all racing to finalize development of their own devices in order to capture those first-time sales, which are sure to be heavily influenced by this tech's novelty factor. Regardless, this year is set to be an exciting one for virtual reality gaming. And with such a prolonged period of development and hype, it seems more likely that the company that first manages to release a final consumer version will be the de facto winner. 

MIND OVER MATTER

While VR gaming is still struggling to achieve status as full-blown commercial tech, Switzerland-based neurotechnology company MindMaze has decided to go a few steps further with its thought-powered VR system dubbed "MindLeap." Developed originally for use in the medical field, the device consists of a head mounted display that comes equipped with motion-capture cameras coupled full 3D point cloud and skeleton extraction to track head and body movements. This enables users to experience a type of augmented reality, not unlike the system implemented by Microsoft's HoloLens. The device also uses sensors that detect brain and muscle activity allowing you (theoretically) to



control this augmented/virtual reality using just your thoughts. MindMaze hopes to release MindLeap's hardware engine and SDK in the coming months so game developers can use it to enhance the experience of other VR headsets.

the apposutra

THE DEFINITIVE
GUIDE TO ACHIEVE
ULTIMATE
APPGASM



this is an attempt at making a definitive guide to the apps that will give you an appgasm. Before you ask, we're not covering your favourite and most popular apps – Facebook, Twitter, Zomato, Amazon, etc. are like the missionary position of apps. Nothing wrong with them, but some of us just need a little more excitement, a little experimentation, a little more than the same old way of fingering our beloved phones.

If this was a dirty book, it wouldn't be the type you hide under the bed in a box, it's the type you burn after reading, because you dare not get caught with it.

We're looking to push boundaries and look at some interesting apps

that perhaps many of you haven't heard of, but will now start a quick affair with. Brief as that affair may be, we're sure the apps that follow will leave a lasting impression, and some fond memories to reminisce about when you go back to the daily grind of boringly prodding your phones as before. Or, you just might give in to all the app-debauchery that follows and turn experimental, and let your phone die happy.

As always, remember to drop us a line about these apps or any we've missed (no missionary style apps please) so that we can share those with the community as well.

Sadly, SKOAR! lovers, there aren't many games for you here, however if you point your browser to <http://digit.in/skoarforplay> you can get your gaming freak on too.

that icky sticky stuff

YOU KNOW, THAT STUFF THAT OOZES OUT OF YOU... GET YOUR MIND OUT OF THE GUTTER. WE MEAN SWEAT. BECAUSE STAYING HEALTHY THESE DAYS IS HARD WORK, AND A LITTLE APP-SISTANCE HELPS.

By Anirudh Regidi



DUNGEON RUNNER: FITNESS

Platforms: iOS <http://dg.it.in/1xcp62o>

Exult in the power that you wield as you swing your mighty sword and penetrate all comers with a single thrust! With Dungeon Runner you transform your daily workout into a power fantasy, an RPG that is controlled by your exercise routine.



JOHNSON AND JOHNSON OFFICIAL 7 MINUTE WORKOUT

Platforms: iOS <http://bit.ly/1HoYSgB>; Android: <http://dg.it.in/1EIqeyu>

If you don't have the stamina for an hour long workout session, fret not, for even quickies can be effective! Follow Johnson and Johnson's free, 7 minute workout routine to the letter and it won't be long before you come into your own.



SPRING

Platforms: iOS <http://bit.ly/1G11cbT>

We all know how hard it is to perform when the mood isn't just right; your rhythm is lacking and the flow, disrupted. And the result? A workout that's hot, sweaty and exhausting, but definitely not fulfilling. Spring is your personal workout DJ that will change all of that by setting the right mood and bringing out

that all essential rhythm to your routine and that spring in your step.



RISE

Platforms: iOS <http://dg.it.in/1xqYnPW>

Rising to the occasion is not always easy, especially so when you've slipped into a rut and the monotony of routine fails to elicit a response. The problem is simple, the solution, simpler. You've either been indulging yourself a little too much or simply neglected yourself and are malnourished, either way, Rise will set your diet straight.



TO BED

Platforms: iOS <http://dg.it.in/19e5Jum>

"Early to bed and early to rise makes you healthy, wealthy and wise", or so the saying goes. But what do you do when you're used to staying up late, when you're far away from home and your mom isn't there to tuck you into bed? You turn to To Bed and let it take responsibility for your sleep patterns, mothering you back to health, wealth and wisdom.



RUN5K

Platforms: iOS <http://dg.it.in/1EBXZuY>

It's high time you started

working on your stamina, especially if you can't keep it up for even 10 minutes at a time. Run5K gets your body into shape by gently coaxing you, pushing you harder and harder till it finally extracts that last bit of potential from your body. It won't be long before you go from jogging 0.5km to running 5km daily.



FITNESS BUILDER

Platforms: iOS <http://dg.it.in/1BHVRTf>

If you take a long, hard look at yourself and bemoan the flaccid state of your muscles, maybe it's time to start working out. Fitness Builder starts you off slow and then slowly builds you up to a peak of fitness, climaxing at the end of an 8 week period. Of course, you can completely customize the regime to something more satisfactory to your taste, if you so desire.



HOT5 FITNESS

Platforms: iOS <http://dg.it.in/1HnW8N1>; Android: <http://dg.it.in/1B7vy7f>

Motivation can sometimes take the form of effective visual stimulus and that's what Hot5 fitness is best suited for. Download this app and observe immeasurably fit, lithe bodies writhing and contorting, their faces flushed with pleasure and the pride in the effortless ease by which they're manipulating their muscles. If that isn't



motivation enough to start on your fitness regime, nothing else will be.

life. Water your body at least gets that load off your mind.



WATER YOUR BODY

Platforms: iOS <http://bit.ly/19KfZM3>; Android <http://dgit.in/1HnY8oE>

Stay hydrated, stay healthy. Over 60% of your body is just fluids and over the course of the day, your body will leak fluids like a sieve, sometimes voluntarily, other times not. If you don't hydrate yourself regularly, it won't be long before your discharge ruins your



NOOM WALK

Platforms: Android <http://dgit.in/1N4SWrA>

What would you say to a companion that silently accompanies you on your walks and jogs, always attentive and alert to your every move? A companion with a friendly face that you can take with you wherever you go, even to bed. Noom Walk is that companion, a pedometer par excellence.



ENDOMONDO

Platforms: iOS <http://dgit.in/1N4UIZI>; Android: <http://dgit.in/1N4UQZm>

We all love maintaining trophies of our exploits and even if we don't admit it to ourselves, we're quite proud of many of them. Endomondo is an app that keeps track of your activity and maintains a log of your achievements. You can set personal challenges, analyse your performance and even send and receive pep talks from friends in times of need. Not just that, you can compete with friends, observe their progress and even share results on Facebook if you so desire.



THERE'S NOTHING SEXIER THAN HAVING A BIG BRAIN. WE'VE SCoured THE STORES TO FIND APPS THAT WILL MAKE YOU BRAINIER, AND THEORETICALLY MORE ATTRACTIVE TO THE OPPOSITE SEX. OR NOT.

By **Mithun Mohandas**



LUMOSITY

Platforms: Android <http://dgit.in/ALumos>
We humans have two brains and one of them doesn't get a lot of exercise. Lumosity is here to change just that. Designed by neuroscientists, this isn't just any memory trainer, it scores you across multiple parameters and really helps you in getting a load off your mind.



COURSERA

Platforms: Android <http://dgit.in/ACours>
There are many more sutras to master than the one that we all know. Coursera has over 800 courses (read: Sutras) in more than 25 subject areas (read: Rooms) so there is bound to be at least one course that'll really rope you in. Moreover, they even hand out certificates for completed courses.



QUORA

Platforms: <http://dgit.in/AQuora>
Quora is to today what Yahoo! Answers was back mid-2000's. Except Quora is better at it. Whether you're worried about your tennis elbow or which frosting should go on your pudding, Quora always has an answer.



DUOLINGO

Platforms: Android <http://dgit.in/ADuoli>
Enough about the mind, it's time for your tongue to roll, slap and get into all sorts of weird positions inside your mouth as you learn the nuances of a new language. Learn to tango in a new lingo with Duolingo.



INSTRUCTABLES

Platforms: Android <http://dgit.in/AInstr>

This one is for the philandering DIY enthusiast who jumps from one project to another across different subject areas. One week you'd be doing carpentry and the very next week you could very well be tinkering with electronics. Now imagine an app where people just like you showcase their personal projects, take part in competitions and also offers the element of discovery. That's Instructables.



EDX

Platforms: Android <http://dgit.in/AEdxOC>

Once you've popped your MOOC cherry you might want to switch to edX for courses designed by more prestigious schools like Harvard and MIT. Most courses you'll find are sciency but you can polish off each section at your own pace.



ULTIMATE GUITAR TABS & CHORDS

Platforms: Android <http://dgit.in/AUltGT>

Learning to play the guitar is getting easier by the day. This app doesn't require any special gadgets so you can use your normal guitar. Just don't break the G-string while fingering your instrument.



MATH42

Platforms: iOS <http://dgit.in/IMath42>

Math can be hard and you'd spend long hours working the formulae till you beat the problem. Math 42 is a nifty app that solves problems and even shows you the steps along the process. Solving for X or XXX was never easier than this.



SIDECHEF

Platforms: Android <http://dgit.in/ASideC>

Going at it alone was never any fun, whether you were beating your meat tender, getting your salad tossed or putting a bun in the oven. We're talking about cooking here. SideChef is your virtual culinary guide with step by step instructions, illustrated with progress images and it even has



UDACITY

Platforms: Android <http://dgit.in/AUdaci>

Programming is all about getting into close quarters with a computer and then pounding out long and hard lines of code one after the other. For some, this comes naturally while others may need a helping hand. Udacity is all about programming unlike other apps that are all over the place.



STARWALK

Platforms: Android, iOS, Windows Phone <http://dgit.in/strwlkk>

If getting lucky is written in the stars you shall get some. But to know your fate you need to get intimate with celestial bodies first. This is where Star Walk comes in – a powerful Stargazing app for Android and iOS. Using augmented reality it transforms the night sky into your personal planetarium, with overlays of constellation shapes and the option to explore over 200,000 celestial bodies.



HEADSPACE

Platforms: iOS and Android: www.headspace.com

Headspace promises to exercise and strengthen the most important organ in the human body. The one in between your ears! The app calls itself "a gym membership for the mind" but your workouts involve not complex puzzles such as Lumosity but rather by doing nothing at all. Clearing your mind and meditating is more difficult than you'd imagine. Try it the ten day programme which involves 10 minutes of guided meditation for 10 days.



LEARNC++

Platforms: Android: <http://dgit.in/icwtudid>

With access to over 60 lessons split into 8 levels that cover basic concepts, this app will teach you how to start creating and compiling your own programs in C++. What it will not teach you is how to crack cheesy one liners such as "I C what you did there".

DOES YOUR PHONE HAVE A NIGHTLIFE?

Learn, work, play and connect with Intel Inside®

SEE WHAT OTHERS CAN'T SEE. ZENFONE™ PIXELMASTER CAMERA.

www.asus.in • Toll free No: 1800-2090-365 • facebook.com/ASUSindia

Zenfone™
with Intel Inside®



SOMETIMES IT'S JUST NO FUN ALONE OR IN PAIRS. YOU NEED TO UP THE NUMBERS TO UP THE EXCITEMENT, AND THE FOLLOWING APPS WILL TEACH YOU THE TRUE MEANING OF 'THE MORE THE MERRIER'.

By **Anirudh Regidi**



BOLDOMATIC

Platforms: iOS <http://dg.it/in/18U2cBJ>; Android: <http://dg.it/in/1CKrGDP>

It's time you let your fingers do the talking! Your waspish tongue has granted pleasure to many, we're sure, but getting down and dirty with your fingers is slowly getting to be a lost art. Fret not, for Boldomatic is your outlet. An "anti-social, text-only" social network this, let your pent up energy gush forth across the pixelated screens of your peers!

fingering above all else. Doodle.ly lets you doodle on your screen and then share those doodles with friends and family alike. You can peruse through the artwork of other users, marvel at their fingering skills and comment on it; you can even seek the advice of the experts or impart your own. Who would've thought that a pinky can be so powerful?

bing community of users, but sometimes it just feels like it's being shoved down your throat. Message after message bleeping away at you, blue in the face and eagerly awaiting your response. Now that it's nestled under Facebook's wing, you know that you'll never know where your privacy truly stands after each update. It's time for a change, maybe not a divorce per se, but a sort of flirtation on the side. Enter Telegram messenger. A fast and secure messaging app that prioritizes security and convenience, it backs up your data to the cloud, if you so desire, and is accessible from anywhere. Sure, its user-base isn't as vast as Whatsapp's, but bigger is not always better.



WEHEARTIT

Platforms: iOS <http://dg.it/in/1FxXCqK>; Android: <http://dg.it/in/1xtuoi>

It's truly uplifting to come across a social network that's this inspiring and it just might fill a void in you, or help you fill a void in someone else, that you never knew needed filling. We heart it is a social network that expects everyone to expect themselves visually and feed you images that match your mood. As We heart it would say, "Connect with your passions, feel something new today." And why not?



FOTOSWIPE

Platforms: iOS <http://dg.it/in/1bpykyt>; Android: <http://dg.it/in/1CTElj9>

Whether you want to share images of your massive cock (and his brood of hens) or an image of some hard buns that you sank your teeth into (for breakfast), sharing an image is more of a chore than we'd like to admit and you'd think that in this day and age, such a task would be easier to accomplish. Fotoswipe alleviates some of the pain by transforming the way you share. Just bump place the devices side-by-side and swipe an image from one screen to the next. Simple. Revolutionary.



INGRESS

Platforms: iOS <http://dg.it/in/1Bouaw6>; Android: <http://dg.it/in/1BemKwr>

Real life isn't always as fulfilling as a virtual one. You might lay in bed, staring vacantly for hours, expecting to be fulfilled, but at times, you just want to grab your screen and lose yourself in a fantasy world where you can be king. With Ingress, you're granted vision of a world that is being overtaken by some kind of unknown energy field that is taking over the world. Towers emerge from the ground, from unkempt fields and barren ground, tall and erect, spewing out energy, splattering the



DOODLE.LY

Platforms: iOS <http://dg.it/in/1Io0kgY>
Another app that values



TELEGRAM

Platforms: iOS <http://dg.it/in/1CkH2rV>; Android <http://dg.it/in/1C6EKLJ>

Whatsapp as a service is a large, throb-

bosom of the Earth itself. You must help the Earth and humanity survive. Join a faction, group together and rid the world of this menace once and for all!



GIFBOOM

Platforms: iOS <http://dgit.in/gifbios>; Android <http://dgit.in/1FynSkU>

GifBoom is a social platform that will provide instant, on-demand gratification no matter where you are. All communication takes the forms of gifs. While some gifs

might only provide superficial entertainment, others can penetrate deep and provide a very fulfilling experience as well. Create gifs from videos, photos and existing gifs, instantly share your quickies with the world, GifBoom allows for all of this. Join GifBoom now and become a member of a pulsating, quickly loving community of people.



JELLY

Platforms: iOS <http://dgit.in/1CU1Toa>; Android <http://dgit.in/1BK8J8z>

The best form of communication is, arguably, oral. It establishes a deep connection with the other person, especially when there's eye contact. The next best thing is Jelly, a "better way to ask questions", it leverages the power of the digital world to allow you to ask questions in more detail. You can ask a question and ensure that it's accompanied by images, map locations, etc. Want to know more about that special fluid that you received from that Amsterdam "nurse"? Put up an image, share the location and ask away!



SOME LIKE TO READ, OTHERS LISTEN, BUT MOST OF US LIKE TO WATCH. VIDEO CAN BE ALL CONSUMING, AND NOT JUST WATCHING THEM, BUT EVEN SHARING VIDEOS YOU'VE SHOT. MOVIES, TV SERIES, SELFIES AND MORE TO BE FOUND HERE.

By **Mithun Mohandas**



MXPLAYER

Platforms: Android <http://dgit.in/AMXPla>

Doesn't matter which video website you frequent the most and what codec they use, this player is going to work everywhere. Even if the default codec pack doesn't work you can always make one on your own. If only there was a way to tag and separate...erm...certain videos from the rest then this would've been the complete package.



VLC FOR ANDROID AND IOS

Platforms: iOS <http://dgit.in/IAVLCMP>

If you're in the habit of two-timing then you'll understand the value of having a backup. After all, why should the fun end if the mood doesn't strike. So if ever you get stood up by MX Player then you can always turn to VLC. The interfaces are quite similar and the same goes for the controls as well.










DOES YOUR PHONE HAVE A NIGHTLIFE?

Learn, work, play and connect with Intel Inside®

SEE WHAT OTHERS CAN'T SEE. ZENFONE™ **PIXELMASTER CAMERA.**
www.asus.in • Toll free No: 1800-2090-365 • facebook.com/ASUSindia



Zenfone™
with Intel Inside®



PLEX

Platforms: Android <http://dgit.in/APlexI>

What rhymes with Plex and begins with an S? Why 'specs' of course! Something that you need not worry about when you're pondering whether to install this or not. Plex organises all your media content and allows you to stream them to other devices with relative ease. If you've got a media centre setup at your lovelshack then Plex is an absolute necessity.



DIRECTR

Platforms: iOS <http://dgit.in/iDirec>

Having another person capture your intimate moments can lead to some awkward incidents so why not take out the third wheel with this app. Directr has storyboard templates for different shots so all you need to do is pick one template and start doing the deed. Directr will inform you how to do it, what angles to do it from and what all to focus on while doing it.



MEERKAT

Platforms: iOS <http://dgit.in/IMeerk>

The latest sensation from SXSW is Meerkat, an app that allows you to stream videos to your twitter feed. Now you could have simply used Ustream but that doesn't pester all your twitter followers so they made an app just for that. And with Twitter's policy regarding explicit content we see an all new ecosystem about to erupt.



STOP MOTION STUDIO

Platforms: iOS <http://dgit.in/IStopM>

Nobody doubts the efficacy of the start-stop method, however, it does become quite tedious which is why this app on the iTunes store is a boon. You can even import images from your camera roll which adds a little bit of flexibility to its functionality. Also, with this app, you now have a really good excuse to play with your dolls.



ACTION MOVIE FX

Platforms: iOS <http://dgit.in/IActMF>

Proposing to your significant other on a bent knee is pretty much the lamest thing you can do anymore. Pull out your 6-inch long iPhone and load up Action Movie FX and you could very well come up with the next Michael Bay action thriller. Start off with fighting mechanised robots before running off to save your significant other from the clutches of a giant octopus. Then end the evening with a nice climax...you don't need an app for that.



VIDEOSHOP

Platforms: iOS <http://dgit.in/IVideS>

So we've covered plenty of apps for the amateur kinda stuff, it's now time to move to the big league. VideoShop has filters, advanced editing options, support for high resolution content and more. To put it in simple words, this app can be described as an amalgamation of everything that we've mentioned before. So why on earth didn't we mention it earlier? Cause it's paid and only for iOS devices.



THE WORLD IS A SMALL PLACE NOW, AND WE'RE ALWAYS LOOKING TO TRAVEL AND EXPERIENCE NEW PLACES AND PEOPLE. THANKS TO THE APPS THAT FOLLOW, YOU GET TO COME AND GO AS YOU PLEASE



AIRBNB

<http://dgit.in/IAirBnB>

While travelling on a budget you'd want to exploit every avenue to save money and AirBnB is a great app for doing just that. It lists people who're willing to accommodate you at their place. Apart from listing out places to crash at temporarily there are also listings for long term sublets and it makes it convenient for you to get familiar with your host/guest.



OPENSIGNAL

<http://dgit.in/AOpnSg>

If you've travelled internationally then you must be aware of the ridiculously high mobile data rates that you have to endure. Open signal lists out all the mobile towers in an area and also all publicly visible routers. So if there is a place nearby that offers free Wi-Fi then there is a chance that OpenSignal will have that listed. All of the data is crowdsourced.



GOOGLE TRANSLATE

<http://dgit.in/AGoTra>

Google translate is absolutely essential if you don't understand the primary language of whichever place you're visiting. It has offline support for its translation service and takes input via three means – audio, image and text scribble. Moreover, Google's phonetic typing takes care of typos. The latest update has OCR built in for a few languages so you can simply snap a photo and everything on it gets translated. Neat!



AROUNDME

<http://dgit.in/AArndM>

Each city has some sort of app that allows you to discover places of interest for you to visit but AroundMe replaces all of those. It sources the places of interest via local yellow pages or from google maps so the listings are pretty up to date. However, local city apps will always have the advantage.



JETLAG ROOSTER

<http://dgit.in/IJtLgRs>

Jetlagged? Jetlag Rooster sets alarms for a schedule that slowly adjusts your sleep cycle to that of the new city you are in. A must have for those who travel long distances, and often.

the quickie

WHEN YOU JUST DON'T HAVE THE TIME, BUT YOUR RAGING NEEDS HAVE TO BE MET, RIGHT NOW THESE APPS WILL SATIATE YOU LIKE NO OTHER, MAKING YOU SIGH WITH SATISFACTION...

By Mithun Mohandas



POU

Platforms: Android <http://dg.it.in/APouZa>

When you've had a pou, it becomes a full-time responsibility. You have to take care of your pou, feed your pou, play with your pou, dress up your pou....the list goes on. We never thought something akin to a Tamagotchi could be so popular ever again. Having achieved immense popularity with over 100 million downloads you know that someone somewhere is playing with their pou.

really awesome timelapse videos but don't have the moolah to plunk down for an iPhone? Get Framelapse for Android. This app has everything you'd need to figure out before making the video. That's right, it even has a inbuilt calculator to know how long you'd have to record to get the video that you desire. The pro version has exposure and white balance locks so your videos don't get messed up thanks to the phone's inbuilt auto-configuration settings.

few folks didn't like the way it worked. Instagram jumped in to save the day with Hyperlapse which does a slightly better job with the stabilisation part so you can be running around trees romancing your partner while taking a selfie/velfie or whatever they're calling it these days.



FRAMELAPSE

Platforms: Android <http://dg.it.in/ATimeL>

Want to make one of those



HYPERLAPSE

Platforms: iOS <http://dg.it.in/IHyLaS>

So iOS came out with time lapse photography integrated into the OS but quite a



SPLIT PIC 2.0

Platforms: Android <http://dg.it.in/ASplit>

Seen those images with the same person pulling multiple poses all within the same frame? Split Pic does just that and then let's you throw on a few filters. Forget threesomes, you can create a swinger party of epic proportions that would have roman senators aghast



ASUS Chromebox
Simplify your life.
Discover the incredible Chromebox.

Small and chic,
perfect for any home

Dual screen capable
& 4K playback support**

Instant on and full
connectivity options

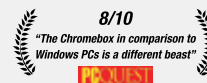
Data sync for
all your devices

100GB Google Drive
space free for 2 years*

**Selected models for 4K playback support. *100GB of storage is for 2 years starting on the day you redeem the offer.

For Detailed Specifications: http://www.asus.com/in/ASUS_Chromebox/Chromebox
www.asus.in | Toll Free No. 1800-2090-365 | For Feedback Email reachus@asus.com or info_india@asus.com

*Conditions Apply. All Specifications are subject to change without prior notice.



ASUS
No.1 in Quality and Services





or filled with lust. Those folks were nuts back then but with Split Pic you'll pretty much be pushing even their limits.



DOTS: A GAME ABOUT CONNECTING

Platforms: Android <http://dgit.in/ADotGC>

Do you require help with connecting the dots? Men are often oblivious to what we assume to be cryptographic messages from the fairer sex. Well, this game isn't going to help you in figuring out what your spouse was implying but when you do end up spending the night on your couch then this game hits the spot.



DUMB WAYS TO DIE

Platforms: Android <http://dgit.in/ADumbW> <http://dgit.in/ADumbW2>

No doubt, the video had a really catchy tune and went viral quickly. Deep down you were hoping for a game to drop. Well there isn't just one but two games where

you get to save dumb characters from needlessly killing themselves over and over again. There are over 28 games to play, each of which lasts barely a minute. A great way to pass time while waiting in line.



DARKECHO

Platforms: iOS <http://dgit.in/IDrEc>

This one was an instant winner for all of us. The game is about navigating through dark mazes and your only method of getting around is by listening to the sound of your footsteps. Each step you take gives off waves that bounce off surfaces and highlights your path. Beware though! Even monsters can hear you. The game continues to keep the user interested with new elements that are introduced just as when you feel that the gameplay has begun to stagnate.



SURGEON SIMULATOR

Platforms: Android <http://dgit.in/ASurSim>

This is one fun game! The name pretty much nails it but don't shy away from this crazy game owing to all those boring "Simulator" games on Steam. This is nothing like that, surgeon simulator is hard to control and the results are hilarious. We can't say the same for anyone peering over your shoulder while you rip apart your patient's ribs and pull his heart out, all the while laughing maniacally.



HEARTHSTONE: HEROES OF WARCRAFT

Platforms: Android <http://dgit.in/AHrtSt>

Heartstone is supremely addictive, so much that you'd include it as one of the stages of a gamer's psychosocial development. Each session will barely last ten minutes but you'd want to jump into another game as soon as one ends. There have been a few complaints recently about the game becoming pay-to-win, well since Blizzard is the developer, we'll give it some time to get balanced before grabbing the pitchforks.



HERE ARE A LIST OF APPS THAT WILL SET YOUR EARS ON FIRE, NO MATTER WHAT YOUR TASTE IN MUSIC - JAZZ TO BIEBER OR BLOCKBUSTER SOUNDTRACKS TO BOW CHICKA WOW WOW... IT'S ALL HERE

By **Anirudh Regidi**



RDIO

Platforms: iOS <http://dgit.in/1xucrIz>; Android: <http://dgit.in/1C6ZrY1>

Whatever your taste in music, Rdio is there to set the mood. Drawing from a library of over 32 million tracks, this app

will provide you custom playlists and stations for all occasions. All. Whether you're off wooing some dusky dame in southern Zimbabwe or a feisty Amazon in the heart of South America, Rdio will always be there for you because the best thing about this app is that you don't need to be online to access your favourite tracks and playlists!



GAANA

Platform: iOS <http://dgit.in/1xehwEz>; Android <http://dgit.in/1ClkKX2>

Being Indian, we're sure that the concept of desi maal appeals to you and Gaana is just that, a collection of over three million hindi songs and videos available on your mobile devices for free. It doesn't matter what your tastes are; as long as they have a desi flavour to them, Gaana will deliver. Hindi, Marathi, Kannada, Malayalam, they're all here.



SMART VOICEREORDER

Platform: Android <http://dgit.in/1C765NV>

Admit, there have been times when you've wanted to record the noises you make, especially when you're in the throes of passion. If you're particularly keen on that, Smart Voice Recorder is the app you need. This app, unlike most other voice recorders will record just like any other voice recorder, but it will also intelligently cut-out long (And awkward?) silences. The sampling rate and compression quality is fully customisable, making this app suitable for recording your bathroom singing sessions and mediocre guitar skills with ease. All recordings can also be shared via MMS or e-mail or any other electronic medium that you prefer.



PIANO TEACHER

Platform: Android <http://dgit.in/1CLE93P>

We'd rate one on one lessons from a tutor at about 10/10 because the very personal and intimate nature of the experience will help you rise to the occasion and realise your full potential, more so when the teacher is able to guide you through the learning process with a gentle hand. Piano Teacher is far less functional than said tutor, but at least, it leverages our affinity to guitar-hero style video games to teach you to play some great tracks. That would indeed be a very interesting lesson.



ROCKET PLAYER

Platform: Android <http://dgit.in/1xehT1V>

When you're so engrossed in a particular activity that you completely lose track of time, and even awareness of your surroundings, there's nothing worse than the wrong song on the radio or on your playlist completely killing the mood. You need to be in complete command of your music and have the ability to set the tone. Android's default player might rub you the wrong way in this department, but JRT Studio's Rocket Player is bound to set things straight.



EDJING

Platform: iOS <http://dgit.in/1EE8jCF>; Android <http://dgit.in/1NaBh1H>

Few things are more seductive to the opposite sex than the ability to play some sort of instrument. This fast-paced digital age has left us with little option in this regard, with no room to store a fancy instrument and no time to learn one. Regardless, this digital age will also come to the rescue of the less talented among us. Take edjing for instance, a simple app with access to a vast music library and with the ability to grant you the power of a modern DJ. You don't always need a custom playlist for those special occasions when you can create your own music now do you?



EQUALIZER+

Platform: iOS <http://dgit.in/1Bfo2Y0>; Android <http://dgit.in/1HyhCuf>


Setting the tone is really important for atmosphere. Whether it's bow chicka wow wow or something more, shall we say, sublime, the experience is ruined if you hear a screech of pain as opposed to a scream of ecstasy (particularly if someone is banging you on the head and saying, "Not that one, you moron!") Equalizer + is, as the name suggests, an equalizer for your devices. It lets you fine-tune your music with a 5-band equalizer and also




MUSIXMATCH

Platforms: iOS <http://dgit.in/1DSHyzi>; Android <http://dgit.in/1xusvtQ>

You can't always get away with mumbling over parts of a song that you don't understand, especially not if you're in the spotlight. Of course you can't go around memorizing every song that you come across, but at least there's an app that'll help you out in your time of need. Musixmatch has an access to a massive music library, but more importantly, a massive collection of synched lyrics. With musixmatch, you'll never be left hanging.





No.1 in Quality and Services


ASUS PB287Q True 4K UHD Monitor | 4K Detail. Unsurpassed Versatility

See Every Detail in True 4K with real 10-bit color
3840 x 2160 UHD resolution, 157 pixels per inch and 1.07 billion possible colors

Get the Fastest 4K Experience Possible
1ms GTG response time with 60Hz refresh rate

Connect to Everything You Own
HDMI, HDMI/MHL, and DisplayPort

For Detailed Specifications: https://www.asus.com/in/Monitors_Projectors/PB287Q |
Sales Enquiries: vikram_s@asus.com | www.asus.in | Toll Free No. 1800-2090-365
For Feedback Email reachus@asus.com or info_india@asus.com




*Conditions Apply. All Specifications are subject to change without prior notice.



funny lingus

IF LAUGHTER IS THE BEST MEDICINE, READ ON TO FIND SOME APPS THAT WILL TRULY BRING DOWN YOUR PRODUCTIVITY, PERHAPS GET YOU FIRED, DIVORCED OR DUMPED, BUT WILL STILL LEAVE YOU TICKLED

By Anirudh Regidi



FLOWFORREDDIT

Platform: Android <http://dgit.in/1N4wpwM>

How could we possibly have a section on funny apps without mentioning the source of all things funny on the Internet? Standing all by its lonesome, tall and erect, is the frontpage of the Internet, Reddit. For the very few of you not in the know, Reddit is this vast community, pulsating with the flow of information, ever on the point of erupting with something new, shocking, fascinating! It's as much a part of the Internet as any essential organ in your body. It behooves you to feel the power of this organ in your hand. Download Flow for Reddit, open the floodgates and assimilate, open-mouthed, the information and knowledge that flows into you.

of your fingers. But be warned, once you start, you won't be able to stop thumbing through the archive!



GATMEME GENERATOR

Platforms: Android <http://dgit.in/1LSsl5D>

There's no denying it, the world now revolves around memes and with the lack of physical contact and "real life" meetings, the only way that's left to express deepest, innermost desires and thoughts is via a meme. GATM Meme Generator rises to this challenge. It has a firm grasp on what it takes to generate a meme and while you may not have the same grasp, you will eventually master the technique.

will let you mix and match memes and the photos on your phone to create a meme/lulz moment that is truly personal and unique. Not many apps can take you to such heights of ecstasy as Cheezburger, you're missing out on something special if you don't have this on your phone.



CYANIDE AND HAPPINESS

Platform: iOS <http://dgit.in/1HyFRbx>; Android <http://dgit.in/1xeniGd>

Originally published on explosm.net, Cyanide and Happiness is the comic you head to when you want a modern comic with old-fashioned, in-yer-face, irreverence. The comics's apps bring these seminal comics to your device and within reach



CHEEZBURGER

Platform: iOS <http://dgit.in/1y0yG1>; Android <http://dgit.in/1BoKSLH>

While GATM is good for generating memes on the fly, Cheezburger is the one-stop-shop for everything funny on the interwebs. Whether you're generating memes or simply hunting for lulz, Cheezburger has you covered. If you have a little time on your hands, Cheezburger



FUNNY OR DIE

Platform: iOS <http://dgit.in/1CLP2CP>; Android <http://dgit.in/1IpSiUU>

Funny stuff is hard to come by. It's a fact. You can scour the web for some sort of "intellectual" stimulation, but depending on the direction of your blood flow, you may not always end up where your brain thinks it wants to be. Funny or Die is an app that curates the funniest stuff from all over the web and presents it to you in a simple and elegant interface.



COLLEGEHUMOR ORIGINALS

Platform: iOS <http://dgit.in/1GPLdvL>; Android <http://dgit.in/1Gd6LUS>

Unless you're like Captain America, emerging from a deep slumber that kept you senseless for decades, you've stum-



**WHEN YOU'RE HOME ALONE, BORED, AND TOO LAZY TO MOVE
A MUSCLE - EXCEPT TO TAP AWAY AT YOUR PHONE LIKE
A BORED CHUMP - ANZEE - YOU NEED A SPECIAL SET OF APPS TO
GET YOU OFF - OFF YOUR BUTT THAT IS...**

**YO**

Platforms: iOS <http://dgit.in/19hRd4P>; Android <http://dgit.in/1Bp9ELX>

How lazy can you get? Well, not much lazier than this we suppose. Yo is an app that lets you Yo your friends. Want to meet up with Big Daddy? Look him up in your contacts and hit "Yo" to send him a "Yo". Double tap to send him yo location.

**MOBIKWIK**

Platform: iOS <http://dgit.in/1BhbAH4>; Android <http://dgit.in/1IqQPOa>

If you're too lazy to even take out your wallet or, for that matter, bother to memorize your online banking details, MobiKwik will alleviate all those burdens by transforming your phone into a digital wallet/bank/credit card as needed.

**TINYOWL**

Platform: iOS <http://dgit.in/1EO2hSI>; Android <http://dgit.in/1Ge3Jj6>

The app may be called TinyOwl but there's nothing tiny about it's scope.

Whether you just have a pit that needs filling or are simply clamouring for a nice, long wiener to chew on, TinyOwl has a restaurant for you. All it takes is a quick couple of taps and your meal will be on its way to you.

bled across CollegeHumor at some point in your life. They're the source of some of the funniest viral videos and other such content on the planet and whether you're a rabid fan who's eaten up all the content that they could throw at you or simply browsing for the sake of it, this app should find a cozy little spot on your smartphone for sure.

Blog in the World" and also videos that are "fresh, hot, funny, beautiful and just plain awesome". Why haven't you downloaded this app yet? Ah. Of course. You're reading Digit.

**THECHIVE**

Platform: iOS <http://bit.ly/1NaYQaG>; Android <http://dgit.in/1FzHy84>

When you're browsing the web in the dark reaches of the night, your intellect limp and flaccid, looking for something to stir it into action, theCHIVE can be your goto app. Going through the intelligently sorted content, you'll feel something stir deep within, something that will make you sit up straight, your hand twitch with excitement. The app curates content from the self-proclaimed "Largest Photo

**UBERFACTS**

Platform: iOS <http://dgit.in/19hnDMV>; Android <http://dgit.in/1DTja07>

If you're a socially awkward weirdo whose mind is so chock full of weird and esoteric facts, such as the exact sequence of events leading up to The Angry Pirate, that you find it almost impossible to have a normal conversation with any other human being, UberFacts will at least make you sound interesting. A treasure trove of "ferociously fun new facts", the app is just bursting with information to be unleashed on a hapless world. Just be warned that not all the facts listed here are not actually facts, so be prepared with a backup plan just in case. **d**

Element of Success

Add a little attitude to all your presentations with iBall's 2.4GHz Wireless Presenter. Probably the most powerful presentation tool an executive will ever hold!



- 2.4GHz Wireless Trackball presenter device
- 6 Button with built-in laser pointer
- USB Micro receiver
- Use as mouse with Trackball & Left click button
- Left & Right button for previous or next slide
- On/Off switch to save battery life

TRACKBALL
PRESENTER

www.iBall.co.in | Over 45 million iBall products sold

Best IT World (India) Pvt. Ltd.: Email: sales@iball.co.in **Mumbai** - 022-6774 5100 / 3081 5100 / 98900 52890, **Ahmedabad** - 97277 14770, **Bangalore** - 96864 49057, **Bhubaneshwar** - 98610 33284, **Cochin** - 0484- 220 7141/42/43/44, **Chennai** - 044- 4216 8560, **Dehradun** - 96390 04150, **Guwahati** - 94357 31459, **Goa** - 080070 35766, **Hubli** - 96111 94669, **Haryana** / **Himachal** - 87500 76813, **Indore** - 98270 89906 / 73899 09965, **Jaipur** - 93517 82703, **Kolkata** - 98301 13980, **New Delhi** - 88600 80588 / 88600 80590, **Lucknow** - 84002 72727 / 05224005840, **Ludhiana** - 95011 14948, **Nagpur** - 0712 2244074, **Nashik** - 93714 69439, **Pune** - 99876 33377, **Patna** - 0612- 326 0947, **Raipur** - 0771- 329 3674, **Ranchi** - 0651-2341022, **Secunderabad** - 92468 02281.

Science leaderboard

Last month we looked at human discoveries in the realm of science. This month it's the natural world.

**More Bits per photon**

Researchers have found a way to encode 2.05 Bits per photon using twisted light. More here: <http://dg.it/MoreBits>

Going nuts for space

Over the years humanity has come up with some very crazy ways to achieve space travel. Crazier still – some of them might work.

Samir Alam

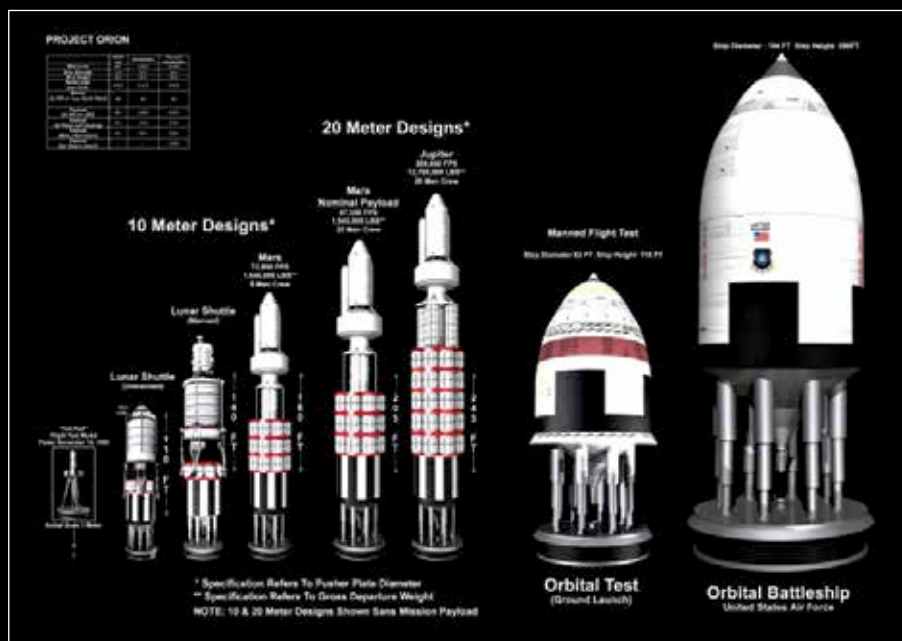
readersletters@digit.in

The line between insanity and genius is very thin. And some scientists want to cross it using space catapults, nuclear bombs and laser beams. The strange thing however is that while their ideas may seem outlandish and insane, they are all scientifically sound. Historically this combination of traits has led to some of the greatest discoveries, and the most horrific events (Nazi eugenics). So we can only be glad that most of these ideas have fallen by the wayside and reduced to comical anecdotes.

When it comes to space travel however the crazier ideas seem to be the best ones. After all, who would have thought that sitting on a needle tip of a 110 meters long intercontinental ballistic missile would take us to the moon? That is what the Saturn V launch vehicle was - a 3000 ton bullet fuelled by 1.2 million litres of high octane fuel that exploded on the face of the Earth in order to successfully carry humans beyond low Earth orbit. Keeping with that tradition, we bring together some of the craziest ideas ever proposed for human space flight.

Project Orion a.k.a Nuclear Farts

On the face of it Project Orion was the most legitimate project to further space travel since the Apollo space program. The project was officially kicked off in 1958 with great minds such as Freeman Dyson leading its charge and was under

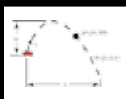


Successive nuclear blasts propel the craft into space at high efficiencies.

serious consideration by the National Aeronautical Space Agency for nearly a decade. The seeds of its scientific premise were rooted in classical physics and had been established in the late 19th century by Russian explosive genius Nikolai Kibalchich and German engineer Hermann Ganswindt. The idea was simple - high impact explosions that occur outside the launch vehicle which propel it into space. This form of propulsion allowed for higher fuel efficiency, higher thrusts and higher specific impulse than any design ever conceived. There was only one hitch - it was nuclear.

Project Orion called for the ignition of nuclear fuel as its main propellant. This meant that in order to launch and sustain flight the launch vehicle would basically be exploding nuclear bombs

in the atmosphere on its way to breaking orbit. The engineering practicalities were well understood and well within the technology of the day. The possibilities of this launch vehicle were so phenomenal that it was a serious contender for interplanetary space travel as it could achieve the greatest speeds with the least fuel payloads. Almost all aspects of the project were tested and proven, apart from the nuclear propulsion tests. Today thanks to computer simulations we know the design would have worked but back then there was simply no place to conduct hundreds of nuclear blasts to see if the math and physics would hold up. Thankfully, with the 1963 Partial Test Ban Treaty it was no longer legally possible to use nuclear technology in orbit and Project Orion was shelved.



Range of projectiles

Ever wondered what is the maximum range that a projectile can reach? Read this in-depth account to know: http://dgit.in/Pro_Range



The math behind food pairing

Head here to know the mathematics that go behind pairing foodstuffs in any typical Indian cuisine: http://dgit.in/Food_Math

Space Age

Mass Driver - The Space Catapult

Just the word "catapult" makes any idea seem silly. But the catapult is an ingenious example of design and engineering. Kids use rubber bands in a catapult to achieve high directional velocity by using the potential energy of the elastic to power their projectiles. So it would seem natural to attempt to do the same for spacecraft. All that would be needed is a seriously large catapult capable of launching thousands of tons of payload at escape velocities. Clearly those would be some really large rubber bands. But humanity is better than that. And thus the mass driver space launch technology was created.

Mass drivers are electromagnetically powered linear motor accelerators intended to be used for non-rocket based space launches. They are similar in principle to rail guns and maglev trains - they use electromagnetic pulses to accelerate their payload. The idea when it was built as a prototype in 1976 by Gerard O'Neill was a proof of concept. However, when researchers began envisioning its scalability for space launches they encountered numerous problems, the least of which was human death. The physics of mass drivers is identical to that of catapults, which means that the projectile launched undergoes tremendous amounts of G-forces - enough to liquify a human being. In addition to which the effectiveness of its power diminishes with larger masses. While for the moment any plans for space catapult are on hiatus,

it isn't inconceivable that we might end up using them on non-Earth bodies where gravity and atmospheric restrictions might actually allow it to work.

Project Icarus

It is always creepy when science fiction and science fact converge towards the future. Project Icarus was announced in 2009 by Kelvin Long and Richard Obousy at the British Interplanetary Society. The core idea behind Project Icarus was to successfully attempt an interplanetary voyage for humans. Ambitious and noble in its goals, the project did have some very interesting attributes, such as its using nuclear fusion powered engines and using planetary bodies like gaseous planets as refueling stations. And while it was conceived as an unmanned interstellar space probe mission it did have a creepy payload - human embryos.

As science fiction as this idea may seem it would solve the issue of having humans survive a generational voyage without going extinct or crazy in a sealed metal tube.

Space Elevator

Anyone who remembers reading Roald Dahl's Charlie and the Chocolate Factory would remember the TARDIS like glass elevator that shoots off into space. The idea of the space elevator is thankfully not as fantastical. It is in fact far stranger, considering how accurately it fits in with



Raising embryos to adulthood on these journeys would require child rearing robots.

physics as we know it. The design calls for three simple elements - a base station, a counterweight and a connecting tether. The counterweight would need to be the size of a small asteroid or space station that is connected to the base station by a high tensile tether. Once the space elevator is established we know that the Earth's rotation would exert great upward centrifugal force on the counterweight keeping the tether taut and firm like a building. We could then attach "climber" chambers that would then be used to travel up and down from orbit.

The idea of a space elevator traces its origins back as far as 1895 when Konstantin Tsiolkovsky proposed its construction. Initially it was designed as a freestanding structure which would extend from the surface of the Earth to altitudes of a geostationary orbit. Since then it was radically evolved to being a tether design. In the last ten years alone the interest in space elevators has soared with institutions like NASA and Google supporting research. With breakthroughs in high tensile material technology coming every year this interest isn't surprising. Using carbon nanotubes a Japanese corporation estimated that it could construct a space elevator with as little as USD 5 billion.

Anti-Gravity Drive

The name itself is enough to make the anti-gravity drive understood by everyone.



The G-force generated riding a space catapult would kill any human in seconds.



NASA to miss launch deadline

According to a post from the Planetary Society's blog, NASA is slated to miss its SLS launch deadline in November 2018 <http://dgit.in/MisseD>



Star Birth

See amazing pictures of destructive star births thousands of light years away from us. Head here: <http://dgit.in/StarDes>

A favourite of the science fiction audience an anti-gravity drive just seems to make sense. Just negate the very thing that ties you down to this rock. But the fact remains – anti-gravity drives just aren't close to reality. At all.

But they have inspired some very amazing work by agencies such as NASA



A Japanese company has already drafted construction plans for a space elevator.

and prestigious institutes like Gode Scientific Foundation. The goal has always been to create a device that creates a phenomenon that works opposite gravity. But as any seasoned physicist would tell you - we barely understand gravity. In the early days, gravity was presumed to be a force acting on mass until Einstein designed general relativity model, where gravity was just an effect of the curvature of space-time. And even as quantum physicists postulate that an anti-gravity particle may exist in nature - there is no proof or foundation for anti-gravity. Any inventions or technologies that have come and gone have been found to be either hoaxes or some other scientific phenomenon such as magnetism.

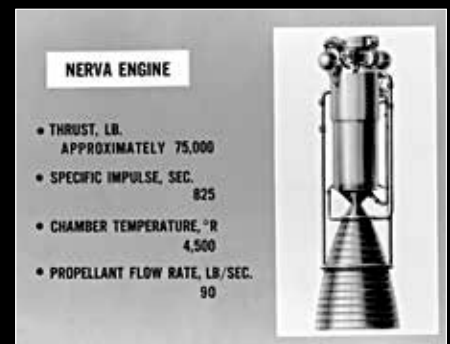
NERVA (Nuclear Engine for Rocket Vehicle Application)

NERVA or the Nuclear Engine for Rocket Vehicle Application was a two decade long program in the United States. It was active from 1952 and was a joint operation of the United States Atomic Energy Commission and NASA, aimed with the goal of using nuclear power to launch space

missions. The program was investigating the safety, efficiency and practicality of using nuclear fuel to make space travel more economical and faster. It worked tirelessly to develop new designs for rocket engines and associated propulsion systems. The program was able to bypass the Partial Test Ban Treaty as it did not call for atmospheric nuclear explosions and was designed to only direct nuclear generated power to its engines.

In 1968 the United States Space Nuclear Propulsion Office certified the NERVA engine NRX/XE to be a success. In fact, the standards of success were based on the ability of a rocket engine to carry out a manned mission to Mars at the time. The design was clean enough that it ensured

that no nuclear fallout would be inflicted on the Earth. The NERVA program was considered an all out success with support from everyone except the government of the United States. And with shifting priorities in the 1970s leaving politicians with no desire of investing in a Mars mission, the NERVA program was killed. Today it still remains as the baseline for any and



The NERVA project is the most realistic design for a nuclear powered rocket ever

all space programs that intend on using nuclear thermal rockets.

Project Daedalus

Project Daedalus was another one of the British Interplanetary Society's studies towards accomplishing unmanned interstellar spaceflight. While it was investigated years prior to the embryo filled Project Icarus, it did have its own brand of crazy - at least at the time. This is because the idea of Project Daedalus came in just three years after the Moon landing. While most of the world was still riding the high of having landed on the Moon, the scientists at the BIS were looking to travel to stars that were light years away. The very process statement for the project was futuristic in its conception which called for the construction of a 100,000 tonne spacecraft to be built in orbit and be powered by nuclear fusion engines.



The project was mostly inspired by Star Trek and LSD during the 1970s.



Glove for health

A new wearable device christened MusicGlove can help stroke patients regain their motor skills <http://digit.in/MuGlove>



Closer to Big Bang

IBM shows off some unusual computer systems that could help the world's largest radio telescope to peer 13 billion years back in time. <http://digit.in/IBMBigBang>

Space Age

The idea was very exciting of course since it called for a massive and versatile probe that could not only travel very fast but be very maneuverable as well. This was before the International Space Station had even been conceived.

The Daedalus probe would require 50,000 tonnes of fuel and carry 500 tonnes of scientific payload across a distance of 5.9 light years on a 50 year journey to Barnard's Star. The deuterium/helium-3 powered fusion engine designs called for a top velocity of .12c which is 12 percent the speed of light to achieve its flight plan. The problem of obtaining vast quantities of fuel was solved by siphoning it from nearby planets such as Jupiter. This would not only reduce launch mass but also make fuel easier to obtain since helium-3 is so scarce on Earth. However as the plan was developed further it started requiring features well beyond human technology like self-replicating factories and on-board robot maintenance workers. The final cost came to around USD 100 trillion, which today would translate to over USD 350 trillion dollars.

Laser-powered spacecraft

The biggest problem for long distance voyages has always been time and how to reduce it. But reducing time by going faster isn't as easy as it seems since escaping the Earth's gravity is only the start of the battle. Designing engines that can thrust spacecraft in the vacuum of space is a whole other problem. One of the most interesting and weird ideas involves the use of lasers, and that definitely catches our attention.

The idea for using photonic lasers comes from the Y. K. Bae Corporation which is all about green energy. According to their designs a laser mounted launch platform orbits the Earth and shoots off high intensity laser beams at spacecrafts on their voyage. It's just that simple. While the laser platform and the spacecraft themselves need to be placed in orbit using conventional means, once in space they can easily be propelled using laser bursts from a distance. The laser platform is able to position itself with on board thrusters as the spacecraft moves towards its destination. Thrust is

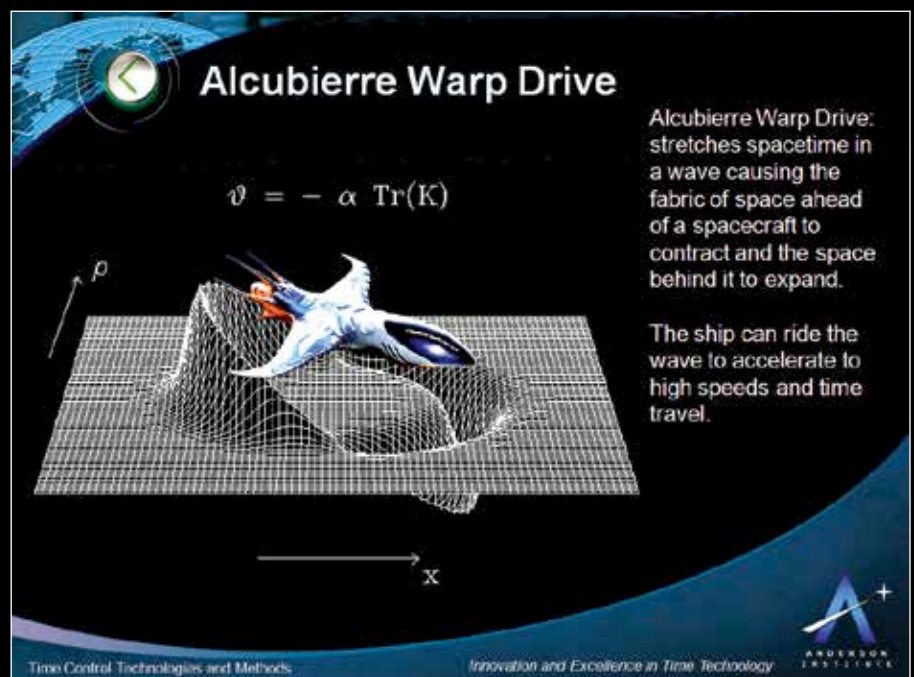
gained by firing streams of photons to increase the craft's velocity. While the plan seems to make sense on paper, the power required to power these orbital lasers is a bit on the higher side at around 1 gigawatt. Not to mention the problems of precision when aiming the laser at increasingly greater distances. And even though both these issues have solutions in the pipeline we just think the idea is just crazy enough to work. Don't look directly into the laser beam through.

Alcubierre drive

This isn't the first time we have looked at the Alcubierre drive. It's a source of con-

anything to move faster than the speed of light. Such a spacecraft would then be static within a "warp bubble" which would be riding along the spacetime curvature as the Alcubierre drive warped the space around it. Far out.

Scientists predict that such a drive could be possible at substantially less power requirements than previously thought and even laid out a basic design. The Alcubierre drive would require the spaceship to be shaped like a tapered oval in the form of a prolate spheroid attached to a large encircling donut like ring. The donut would be composed of exotic matter that would be controlled



This design is literally how the Warp Drive in Star Trek would work. Unbelievable.

stant wonderment and giggles when you realise it's an actual honest to goodness "warp drive". A warp drive that is exactly as Star Trek demonstrated. A curious case of science fiction technobabble that was re-built using cold hard science. Miguel Alcubierre is the scientist who proved this possibility using Einstein's field equations in 1994. He arrived at a solution where instead of a spacecraft moving at light speed, it was space that curved around it. The idea of the Alcubierre drive was then well within the limits of Einstein's theory of general relativity which normally doesn't allow for

to cause space-time to curve around the starship as it was suspended in a warp bubble. This concept if implemented would allow the spacecraft to travel at nearly 10 times the speed of light - making the journey to the Moon in one twelfth of a second, to Pluto in 33 minutes and to Alpha Centauri in 159 days. Of course this technology would require the harnessing of elusive exotic particles and have a host of side-effects, from complete lack of steering control to a sonic boom shockwave that would destroy anything in front of the spacecraft at its destination. **d**



Flying cars by 2017

With the advancement in car technology, industry analysts suggest that we could be driving flying cars earlier than predicted <http://dgit.in/FlyACar>

Female Thor comic sells more

Marvel is getting more than good business from female Thor. In fact, it's sold more comics than the previous Thor series <http://dgit.in/FeThor>

The Sci-Tech leaderboard

(Part II)

In part I we looked at extremes in scientific discoveries, achievements and inventions. Here we'll check out what the natural world has to offer.

Samir Alam
readersletters@digit.in

The Thinnest Galaxy in the Universe

We usually imagine galaxies to be gigantic nebulous configurations of stars and planets that extend for light years in every direction. But in 2013, scientists from NASA and ESA discovered a spiral galaxy IC 2233 which is the flattest galaxy known to man in the universe. Positioned in the constellation Lynx, this galaxy is about 40 million light years from Earth and was discovered originally



by British astronomer Isaac Roberts in 1894. But by studying it with the Hubble Space Telescope, scientists have discovered that this galaxy's thickness is at most one-tenths of its diameter. The discovery of this feature makes IC 2233 the thinnest galaxy on record and appears to be "needle thin" in comparison to the rest of the cosmos.

The Largest Black Hole in the Universe

Nestled in the thin width of the NGC 1277 disk galaxy is the largest black hole in the universe. Discovered by German astronomer Remco van den Bosch and his team in 2012 in the



Perseus constellation 250 million light years away. This supermassive black hole is estimated to have a mass of about 17 billion suns. The size of the galaxy itself indicates that it's radius would be 11 times the distance from our Sun to the planet Neptune. In comparison to

its host galaxy, it makes up 14 percent of all mass in the galaxy and 56 percent of the galaxy's core mass. The discovery of this supermassive black hole is leading the discovery team to the local galactic neighbourhood where they expect to find up to 5 or 6 similar black holes. In the face of this potential discovery the need for a new category of black holes might be required.

Maximum song possibilities

Have you given a deep thought about the maximum number of different songs than can exist? Well, here's the answer: <http://dgit.in/MaxiSong>



Pi for Pi

Pi day just went by and as a celebration, here's the best fractional representation of the mathematical constant: http://dgit.in/Pi_Frac

Feature

The Largest Galaxy in the Universe

The largest galaxy in the known universe – IC 1101 was initially discovered by British astronomer Frederick William Herschel I in 1790. For the longest time, it was categorized as

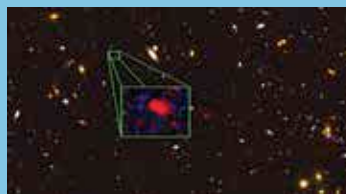


a nebulous feature until Edwin Hubble discovered in 1932 that these features were actually independent galaxies. Using modern techniques the galaxy was found to be an Elliptical galaxy making it one of the

largest in its category. But as we studied it from over a billion light years away we discovered that it was, in fact, the largest galaxy ever discovered. With a diameter of six million light years and a mass of nearly 100 trillion stars it is over fifty times the size of the Milky Way and 2,000 times as massive. Unfortunately, the galaxy is on it's last legs, giving birth to very few new stars.

The Oldest Galaxy in Existence

Given the scale of the Universe what we witness across cosmic distances are snapshots of the past. And by observing the farthest reaches of the cosmos we are able to



witness deeper into the past as well. In 2013, z8_GND_5296 was discovered to be the oldest known galaxy in existence and is at a distance of 13.1 billion light-years away. It is estimated to have formed

700 million years after the formation of the universe and is currently the closest window to the big bang. It was discovered by the Hubble Space Telescope as a part of the Cosmic Assembly Near-infrared Deep Extragalactic Legacy (CANDELS) survey. This survey has discovered 100,000 galaxies so far, of which 43 have been analysed. It's possible that we may find an even older one.

The Largest Occurring Natural Protein

Inside every human being is a specific gene - the TTN gene - that is responsible for processing a protein that gives our muscles passive elasticity. This protein is the largest naturally



occurring protein known to science and is also greater than one micrometer in length. The protein is estimated to have as many as 35,200 amino acids in its chain and is composed of 244 individually folded protein

sets connected by peptide sequences. It is known casually by the name of, Titin, however the chemical formula for this protein chain is $C_{169\ 723}H_{270\ 464}N_{45\ 688}O_{52\ 243}S_{912}$ which also makes it the longest scientific word in the english language with 189,819 letters. It took a man 213 minutes to correctly pronounce the name.

The Largest Living Organism

When we think of big organisms we imagine a blue whale or an elephant. But the largest organism in existence is the honey fungus specimen found in the Blue Mountains of Oregon in the United States. This honey fungus is in the form of a mushroom as you would imagine on a pizza but it measures 3.8 kilometres across.



These large clusters of brown and yellow mushrooms may appear distinct but are actually connected below the soil to a gigantic single organism. There exist vast networks of tubular filaments called

mycelia under the surface that occupy a large amount of space. They have been held accountable for the 1998 deaths of large tracts of trees in their region of around 10 square kilometres. Not only are they big but they're old too. The organism is estimated to be anywhere between 1900 and 8650 years old.

ASRock
No. 1 in Motherboards

www.asrock.com

SMART BUY 2014
X99M Extreme4

SMART BUY 2014
Z97 Extreme6

APPROVED 2014
X99 Extreme4

APPROVED 2014
Z97 Extreme4

2014
Tom's
HARDWARE

Super Alloy
Stable and Powerful

CAN'T STOP.
WINNING.



Thinnest speakers

Richard Haberkern – a tinkerer, is trying to make paper thin speakers. You can back him on his kickstarter : <http://dgit.in/PaperSpeakers>



Productive ways

Head to this Quora thread where you'll find some of the most productive ways to spend your time online: <http://dgit.in/LearnNew>

The Largest Cosmic Structures

We imagine the Universe to be vast open spaces of vacuum filled with planets, stars and other interstellar objects. Each of these appears to be one single structure surrounded



by many others. But in astronomical terms we have quantified them as systems, galaxies and nebulae based on how they congregate with respect to their gravitational entanglements.

In this regard cosmic structures can vary greatly in size and scope. The Hercules–Corona Borealis Great Wall structure was found in November 2013 to be the largest known cosmic structure ever discovered. It was detected by mapping the location of gamma radiation bursts which were caused by exploding stars within it. By measuring these bursts researchers were able to estimate the size and expanse of the superstructure. Astronomers are currently making sense of this Great Wall, which is 10 billion light years across.

The Strongest Natural Substance

Limpets are snail like creatures that you wouldn't imagine having teeth. They resemble clams and are found by the shore side. But surprisingly they possess the strongest naturally



occurring substance known in their teeth. This fact was discovered by Asa Barber and her research team at the University of Portsmouth when they inspected limpet teeth at the atomic level. Until

this discovery the strongest naturally occurring substance was thought to be the silk of a spider but no more. In nature, limpets use their teeth to grab onto rocky surfaces and chisel out the algae in the rocks for food. The unique material engineering aspect of this discovery is that irrespective of size, the strength of limpet teeth remains constant. Scientists and engineers are trying to figure out a way to mimic their structure for use in civil, marine, automotive and electronic engineering projects.

The Longest Standing Math Problem

Until 1995 the longest standing unsolved math problem was Fermat's Last Theorem. But after 365 years of being a puzzle to generations of mathematicians it was finally solved by Andrew



Wiles. Replacing it was the ever notorious Goldbach's Conjecture which was proposed by Christian Goldbach in 1742 and has since remained a mystery. The Goldbach Conjecture is not a complicated problem to state, it simply posits that every positive even numbered integer greater than 3 is the


sum total of two prime numbers. For example, the positive even number integer 8 is a sum total of two primes 3 and 5. Sounds simple enough, right? However, there has been no conclusive proof that this is a constant rule. Finding methods to prove or disprove this conjecture haven't been created in the last 273 years. Although, by means of heuristic logic it is highly likely that the conjecture is true, no mathematician has as of yet proved it conclusively.

The Most Powerful Magnet in Nature

The cosmos is littered with the permutation and combination of nature. In the near chaotic interactions of space, where matter and time combine to deliver remarkable results,



we find the oddest of objects. When it comes to nature's most powerful magnet, we have to look no farther than our own galaxy for collapsed neutron stars called magne-

tars. Two competing neutron stars, of the soft gamma repeater variety, called SGR 1806-20 and SGR 0418 claim the title of the most powerful magnets ever discovered. Both of these rotating neutron stars possess a magnetic force capable of slowing down a Rajdhani express train as far away as the Moon. The SGR 1806-20 is only 50,000 light years from Earth, while SGR 0418 is closer at about 6,500 light years away. The former was discovered in 1979, while the latter was revealed to us as a magnetar in 2013, four years after its 2009 discovery. Perhaps the most attractive pair of lights in the sky. Sorry, couldn't help it. 

worldview

OUR PICK OF THE BEST TECH ARTICLES FROM AROUND THE GLOBE

(MUST READS)



SONIC THE LIFE SAVER

Matthew Bennett from Vice describes how Sonic the Hedgehog's manic energy gave him the motivation to fight through grueling chemotherapy treatments. A truly inspirational read. Who says video games are useless?

<http://dgit.in/cansonic>

THE SECOND CLASS LANGUAGES

Is Unicode biased towards the Latin alphabet? Even the consortium that decides everyday writing systems is strangely made up of white people of European descent. This detailed feature talks about the very controversial Han Unification project and what it means for you:

<http://dgit.in/poopnname>

INSIDE PROJECT TITAN

The internet of late has been ripe with rumours about Apple's top-secret electric car project christened "Titan". This AppleInsider article puts the rumour mills to rest and talks about the how an Apple Car is a possibility.

http://dgit.in/Car_Apple

WHERE'S THE TIME?

Technology is meant to minimize effort and make things happen faster, thus saving our precious time. But free time still evades us and remains an illusion.

Here's why:

<http://dgit.in/TimeDeficit>

[The VergeCorner]

ANATOMY OF A HACK



By the time Partap Davis woke up, most of his online life had been compromised: two email accounts, his phone, his Twitter, his two-factor authenticator, and most importantly, his bitcoin wallets. Check out this detailed step-by-step account of how an overnight digital heist was perpetrated: <http://dgit.in/haxorrd>



Memory in the flesh

Could memories exist outside the brain? In the 1950s a renegade scientist actually suggested this as a possibility. Apparently memories could indeed spread beyond the brain to the rest of the body:

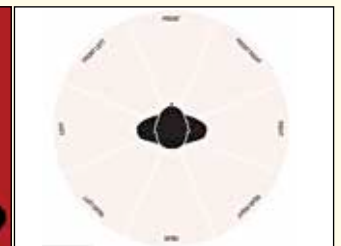
<http://dgit.in/choppedworms>



Ever heard of sexual singularity?

Apparently it's that point in time when people will prefer networked sex over real-world sex. It's a brave new future thanks to the emergence of VR. Read this classic Verge-style rant tearing down a talk they heard at the recent SxSW conference.

<http://dgit.in/futrprn>



Surrounded by sound

Binaural audio a century-old audio technology is making a comeback thanks to VR. Don't be quick to dismiss it as "surround sound". This is different. Find out how 3D audio hacks your brain in this detailed long-form article:

<http://dgit.in/ntstreo>

GENDER ISSUES EVERYWHERE

Did you know that about 77 to 79 percent of Venture Capital firms have never had a female representative on their board? Even the Silicon Valley is no stranger to such biases. After Jayesh's column last month, this time it's Wired on this issue: <http://dgit.in/FixThisPeople>

KODAK ISN'T DEAD

Film has been dead from some time now and with it went all of Kodak's glory. But with a slew of experienced researchers at its disposal, Kodak is thinking beyond film and betting big on new technologies. What technologies? Find out: <http://dgit.in/BeBackSoon>

OF LIGHT AND SUPERCOMPUTING

Researchers in the US have come up with a much more efficient way of quickly transmitting data through circuit boards using light. It's a mind bending experiment or should we say light bending? http://dgit.in/Light_Control

A WEARABLE THAT ZAPS CANCER?

According to a recent patent filed by Google, the search giant has plans for a wearable device that can zap injurious particles in the human body using a smart wristband and magnetic nanoparticles inside the bloodstream. <http://dgit.in/ZapItQuick>

All you need to know about the new 12-inch Apple MacBook

The new MacBook has a lot of segment firsts in terms of specs, features and design elements, so let's take a look at what the MacBook is all about.

– By Hardik Singh



MacBook is made for hybrid devices and high performance tablets with fanless design, employing passive cooling techniques. The graphics on the MacBook is handled by Intel HD Graphics 5300, a very basic GPU that sits at the bottom of the latest Intel Core platform. The laptop comes with 8GB RAM by default and gives a choice between 256GB or 512GB of PCIe based flash storage.

The laptop boasts a mere 13.1 mm in width and weighs 0.92Kg. This easy to carry laptop will be available in three colours: Silver, Gold and Space Grey. Just to put things in perspective, the MacBook Air 13 weighs 1.35 kilograms and is 17mm thick.

Build

The unibody MacBook is made out of machined aluminum, promising the same strength and durability as the MacBook Air and MacBook Pro. Though, we'd reserve our judgment on the overall build quality till we review the device.

Display

Apple has squeezed a 12-inch display in a smaller 11.04-inch chassis. The 12-inch display boasts of 2304 x 1140 pixel resolution. It is a 16:10 aspect display, just like the MacBook Air and Pro screens. Apple claims to have achieved higher brightness levels while keeping the power consumption down by increasing the aperture of each pixel. Again, a claim that we shall surely test before believing it.

Keyboard

The new MacBook features a 'butterfly-style' keyboard mechanism, promising even feedback and response across the entire surface area of each key. Each key on the keyboard is illuminated by dedicated LED underneath every key, promising precise backlighting

Apple announced the all new MacBook early last month. It is not a replacement for the MacBook Air or the MacBook Pro, the new MacBook is an addition to the line of MacBooks, targeted at users looking for a compact, slim and light laptop with a ultra high resolution display. The new Apple MacBook starts at 1299\$, yes that is a lot!

Core components

Let's start with the basics. The new MacBook will be powered by an Intel Core M chip (14nm Broadwell platform). The Intel 1.1 GHz Core M processor used in the

Design

The new MacBook looks and like an extended version of the MacBook Air. Just that it's a lot thinner, smaller and lighter while offering the same unibody design.



Comes in three colours



WHY DOES VR STILL SUCK?



Before you start typing out angry emails to the

editor, hear us out. Yes, we know Virtual Reality is the next big thing but we tend to agree with Gizmodo – it isn't quite there yet. Be sure to check out this article explaining from a neurological perspective why VR still looks bad:

<http://dgit.in/ImproveVR>

CHINA CONFESSES



With multiple reports flying everywhere on the internet of how China is responsible for hacking and stealing trade secrets from companies in the U.S, China has finally admitted in an official document that it has secret units for waging cyberwar.

http://dgit.in/Cyber_War

STARTUP VALUATION



It's the age of tech startups with new companies rapidly

emerging and skyrocketing overnight to billions of dollars worth of valuations. But how can startups be valued so mind-bogglingly high? Well, here's the crazy math behind all of it:

<http://dgit.in/StartupMath>

MUSIC STREAMING UNDER THREAT



Yes, everyone loves streaming music and so, the services that

we use for streaming must be really profitable from that logic right? That isn't the case unfortunately. Industry analysts say that streaming music companies aren't profitable. Here's why:

http://dgit.in/Stream_It

The 'Force Touch' trackpad

Apple has redesigned its glass trackpad, adding a haptic engine, which will send a tangible haptic feedback to the fingertips



The Trackpad

of users when they perform certain tasks. The touchpad now features Force touch sensors which will not only take into account a 'tap' but the pressure of the 'tap' as well.

Ports. What Ports?

We just have a port! Wireless & USB Type-C With the new Macbook Apple is among the first companies to adopt the USB Type-C port. The laptop sacrifices all other regular ports like power, USB, Display, HDMI, VGA, for a single USB Type-C port. Apple is betting big on the use of wireless and customers would be required to buy suitable accessories. A headphone jack is included though. Seriously, just one port might turn off even the most hardcore Apple fan, especially when the port extending accessories cost you a bomb!

Smallest custom Motherboard

'Logicboard' in Apple's terminology, the new MacBook has one of the smallest motherboard ever developed. This was partly possible because of the tiny 14nm power efficient Intel Core M chip

which does not require a fan to keep it cool. Besides saving space on the rotating fan, the motherboard itself has been custom designed with highest density of components ever on a piece of PCB. The downside? If something fries, you gotta replace the entire logicboard, you can safely forget about getting this baby repaired!

Battery

The tiny motherboard was a deliberate attempt to levy a lot of space in the tiny chassis for battery packs (or shall we call them slices?). Apple has used a custom terraced battery cell over the traditional rectangular battery pack. Apple claims that the new design helps in 35% more battery capacity. Well, you certainly need all the wizardry to power that pixel monster 12-inch screen. So, yeah, a necessity rather than a feat. And, after all this, the MacBook promises 8-10 hour battery life, the same as the MacBook Air and MacBook Pro. Nothing exceptional, we'd say!

OSX

The traditional operating system of choice MacOS is present here as well. The new OS which was recently updated is highly integrated with iOS. OSX is easy to use and features many productivity apps

Accessories

Since the MacBook features a single USB Type-C port, there already are half-a-

dozen accessories available to extend its capabilities. Apple will be broadening this list further.

Other updates

Apple also updated 13-inch MacBook Pro Alongside the MacBook, Apple has silently updated the 13-inch MacBook Pro as well which is getting the new fifth-gen Intel Core processors (up to 3.1GHz), Intel HD 6100 graphics, faster flash drive storage with upto 10 to 12 hours of battery life. The laptop is also getting the Force Touch Trackpad. The updated 13-inch MacBook Pro already has India pricing, it starts at Rs. 94,900.

More refreshes

And, the MacBook Air also gets a tiny refresh. Both MacBook Air, 11-inch and



An exploded view of the innards

13-inch are being updated with fifth gen Intel core processors (up to 2.2GHz), Intel HD Graphics 6000 and thunderbolt 2 port. The 13-inch model gets refreshed with faster flash memory chips too. The Indian pricing for the updated MacBook Air starts from Rs. 65,900.

<http://dgit.in/newmacbk>

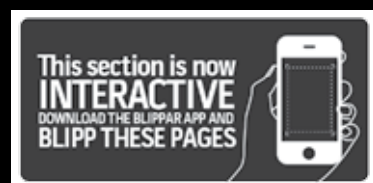
KURZ GESAGT - IN A NUTSHELL

Run by a mixed group of musicians, designers and journalists, this is one of the few channels on



YouTube that focuses on creating quality videos on stuff like space, time, evolution and more. Well made animations, lively voiceovers and great execution all help tremendously in understanding these difficult concepts.

<http://dgit.in/KurzGesagt>



For a list of all the links from this section, head over to <http://dgit.in/WVApril2015>

(PRODUCT LAUNCHES)

SONY XPERIA E4 DUAL



Sony's latest budget smartphone, the Xperia E4 Dual features a 5-inch 960 x 540 pixels display. Running on Android KitKat, it's powered by a 1.3GHz MediaTek MT6582 quad-core processor and 1GB RAM. Price: ₹12,190

OLYMPUS OM-D E-M5 MARK II



The original Olympus OM-D E-M5 which is two years old now has finally seen an upgrade with the newly released OM-D E-M5 Mark II, another Micro Four Thirds (MFT) mirrorless camera with interchangeable lenses. Price: ₹74,990

SAMSUNG GALAXY TAB A



A new mid range tablet featuring a 9.7 inch screen with a 4:3 aspect ratio has joined the Samsung stables. The Galaxy Tab A makes use of a 1.2GHz 64-bit compatible Snapdragon 410 SoC and also comes with Samsung's S-pen. Price: NA

PICTURE PUZZLE

ABSOLUTE TIMEPASS



UNJUMBLE
ON YOUR MOBILE



DOWNLOAD BLIPPAR APP ► FILL SCREEN WITH IMAGE ► BLIPP IMAGE INTO LIFE!

Top 3 YouTube Picks

Make sure your boss doesn't catch you goofing off with one of these videos playing on your screen



Impressions: New Macbook
Duration: 6 min 11 seconds
MKBHD tries out the sleek new Macbook which is supposed to be only 13.1 mm at its thickest.
<http://dgit.in/MacThin>



Magnetic thinking putty
Duration: 2 min 09 seconds
Ever saw how a huge pile of soft, slimy looking magnetic putty behaves around a powerful magnet?
<http://dgit.in/MagPutty>



Mercedes-Benz F 015
Duration: 3 min 41 seconds
See today what driving is going to be like in the future. Turns out there's not much driving involved!
<http://dgit.in/MercFuture>

Intro to Docker

>> Docker is a tool that the world didn't know it couldn't live without till it was finally here. > by Kshitij Sobti

Docker's journey into existence has been an interesting one. Bit and pieces of what make it what it is have been appearing in the Linux kernel over the past few years. Nearly every bit of technology it is built on is was in itself groundbreaking and revolutionary for Linux.

Before we get into that though, we should first mention what Docker is exactly. Docker is an open source tool for creating and managing application containers. In essence it allows you to run an application in an isolated environment, where it can only interact with, and affect the container it is running in. A single command can set up, boot and run an application in a OS that isn't even installed on your computer yet!

A large part of Docker is actually about making it simple and easy to use Linux features that are already there by building tools and services around them. The end result is that if you want to run a simple "Hello World" command in a virtual Ubuntu install, all you need to do is:

```
sudo docker run ubuntu echo "Hello World"
```

This will automatically download the latest version of Ubuntu, "boot" it, run the echo "Hello World" command in it, and shut things down. Want to do the same thing on CentOS, or Fedora?



Docker is rather new, but has already become a major player in the Linux ecosystem.

```
xitij at xitij-opensuse in ~
$ docker run ubuntu echo "Hello World"
Hello World
xitij at xitij-opensuse in ~
$
```

What else did you expect to see?

*coding matters



*Project Atomic

>>Both Project Atomic and CoreOS are minimal operating systems that are designed to serve as hosts for software running on Docker, rather than install software on these OSs you use Docker to install and run the software.

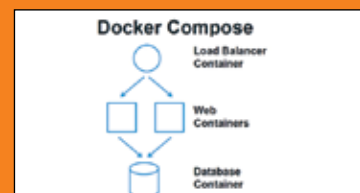
<http://dgit.in/PrjAtom>



*Docker Machine

>>Docker machine is a new project by Docker that allows you to quickly get a machine up and running with docker installed on it, whether it is a local machine, a VM, or a service like AWS / Rackspace.

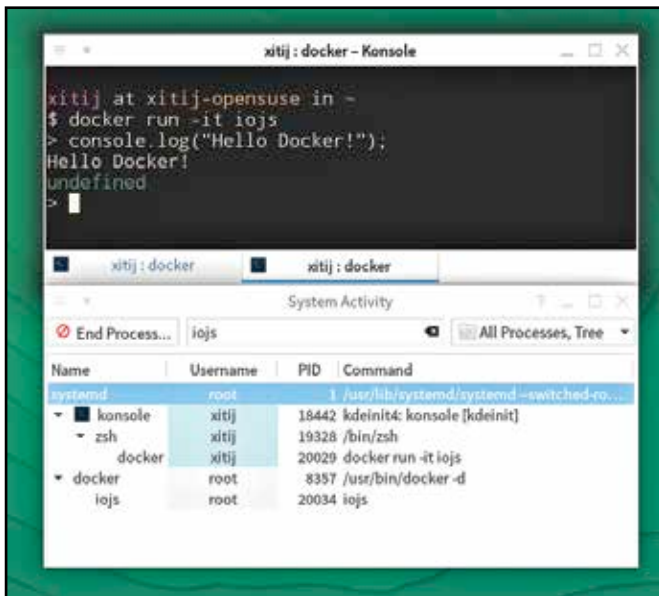
<http://dgit.in/DcrMac>



*Docker Compose

With docker compose you can describe collections of connected Docker containers, that can be all be booted, restarted, stopped, and scaled with a simple commands. It can work with Docker swarm to distribute these across machines.

<http://dgit.in/DcrCmp>



As you may notice, the running iojs process is directly visible on the host system.

Just change 'ubuntu' to 'centos' or 'fedora' and you are good to go! NOTE: Wherever we use the docker command, you may need to prefix sudo depending on how it is configured on your OS.

This works because in addition to all the magic Docker does on your own system, it also comes configured with an online repository of images of different operating systems. It can automatically pull any OS or application that someone has uploaded to their registry, and install it and run it on your system.

Once it has been downloaded and installed, anytime you run the same command in the future, it will not need to download and install Ubuntu again, it will simply reuse the existing install. So future invocations will run instantly, and show an output in under a second. It's almost as if it's running on your own system directly! Well, that's the thing, it is.

On the shoulders of giants

If you've used virtual machine software like VirtualBox and VMWare, this might seem a little familiar, while at the same time a little fishy. Virtual machine software boot an entire operating system with its own kernel in order to give you access to an isolated environment in which you can run software. How does Docker do it instantly?

The answer is that instead of isolating an entire machine, Docker uses features of Linux to isolate just the bits of software that need to be isolated. It puts constraints only on this environment.

Two of the most important features that enable this are cgroups (or control groups) and namespaces. There is a LOT to both these technologies, but here they are in brief:

- **Namespaces:** Namespaces allow multiple applications running on a system to think they are running in different environments. For instance two applications running in different namespaces will not 'see' each other if they ask the system for a list of running applications. Namespaces can also give people a different view of the file-system, and network etc.
- **cgroups:** These are a Linux feature that allow one to place restrictions on how many resources they consume. For instance you

could launch an application while limiting the RAM it uses to 100MB, or limiting its usage of the CPU.

As you can see, just by combining the above two, you can get features similar to that of a virtual machine, i.e. applications running in a different isolated environment, with a controlled amount of resources.

In addition to the above two, Docker also makes extensive use technologies such as btrfs / aufs, systemd and libvirt.

Basic Docker Usage

The simplest way to get started with Docker is to use the run command as we had demonstrated before. However, there is a lot more you can do with Docker than just that.

While the run command automatically downloads an image when you run it, you can also just ask Docker to download an image using docker pull.

For instance if you want to check out io.js, just run:

This will download an OS that has io.js pre-installed. After this you can use the docker run command to run applications in this image. At this point if you wanted to try io.js you should run.

The '-i' and '-t' here tell Docker to run in interactive mode, so you can enter commands rather than just see output. Notice, how unlike before we have not really told it which command to run inside the io.js image. This is because the way the io.js image is built, simply running it will drop you into the io.js interpreter. You can still specify commands in which case they will be run instead of the default command.

Docker Mechanics

Lot's of interesting stuff happens behind the scenes every time you use docker run. Here is what is going on behind the scenes when you do docker run. Docker first creates an entirely new, fresh environment that Docker calls a container built on top of the 'iojs' image it downloaded. In this container it then runs whatever command you specify, thus isolating any changes those commands make to the container, and leaving the image unaltered.

What this means is, every time you run a command as docker run ubuntu <command> that command runs in its own container! It runs as if on a fresh Ubuntu install. Any changes made by a previous run command are not visible to the next run.

But what if you want to continue where you left off. Well, the container with all your changes is still there. While docker run starts



This little Firefox is running in a Docker container.

```
xiti: docker - Konsole
xiti: at xiti:~$ docker run -it centos bash
[root@2ac70fd88e11 /]# cat /etc/centos-release
CentOS Linux release 7.0.1406 (Core)
[root@2ac70fd88e11 /]# ps
PID TTY          TIME CMD
  1 ?        00:00:00 bash
 18 ?        00:00:00 ps
[root@2ac70fd88e11 /]#
```

As far as this bash session is concerned, it is running on CentOS.

commands in a fresh container based on the image you specify, docker exec runs command in an existing container / layer.

You can see a list of running containers with docker ps and see a list of all running and stopped containers with docker ps -a. Note the container ID and specify it after docker start <id> to start that container, and docker exec <id> <command> to run a command in that container.

Every command you run with docker run crates a new container, even if just listed files with ls. To avoid this you can specify --rm as a command line argument to docker run and it will automatically remove the container when it is done running. This is useful for testing commands or just playing around.

If you make some changes in a container, you can, if you want, save it to an image, so you can base future changes on that. You can have layers on top of layers, so you can have a base Ubuntu image that you download, a layer on top of that that installs a few important software, and another layer on top of that with your own code and files. Or however you see fit.

The great thing here is that creating a new layer does not create a copy of any files, it simply reuses them. So you can have a python layer on top of ubuntu, and a iofs layer on top of ubuntu, and they will both share the same ubuntu install with changes isolated to their respective images.

Terminology

What with layers, and containers and images, it can get a little confusing. Here are some basic Docker terms that will make it much easier to understand what is going on.

- **Images:** These are like ISO or VHD images in the sense that they represent a set of files and folders that constitute an application and its environment. An Ubuntu image will have everything a basic Ubuntu server install has minus the kernel and drivers, and other stuff that interacts with the hardware, since that is handled by the host OS. You can see a list of installed images using docker images.
- **Layers:** If you are familiar with layers in photography software, the effect of layers in Docker is quite similar. For instance, we

*pointers

>>Interesting developer videos



*Talks from GDC 2015

>>The 2015 Game Developers Conference is over and there is a lot to learn from it, there are many free videos that go up on the GDC Vault website after GDC, although many require payment as well.

<http://dggit.in/GDCTalk>



*Microsoft on EdX

>>If you're interested in Microsoft's technologies, they have released a couple of courses with hours upon hours of training video on the brilliant and free EdX platform.

<http://dggit.in/DevwrxEdx>



*Intro to UE4 on GitHub

>>Unreal Engine 4 is now free! So you can now start playing around with the successors of one of the most popular game engines, for free. Here is how you can access its source code on GitHub.

<http://dggit.in/DevUE4Intro>



*Learn Ruby now

>>This video tutorial by Derek Banas tries to teach you the Ruby programming language, covering almost everything.

<http://dggit.in/LearnRubyTut>



have the Debian image, on top of it we add Apache and PHP to get the PHP-Apache image. On top of that we can add a Wordpress install and configuration to get the Wordpress image. Now, you can use the Debian

image in isolation, or the PHP-Apache image, or the Wordpress image. All these images are related to each other but are also usable separately. If you now install Drupal, and it uses the same PHP-Apache image, Docker won't re-download what it already has. Running docker images -a will show you all image layers.

- **Containers:** A container is where you can actually make changes. Whatever commands you run don't affect any of the images; they are read only. Rather any changes are encapsulated inside a container. If your container is useful enough you can make an image of it, and then build containers, or other images on top of that. For instance, you could run an Ubuntu container, install some tools you use often, and then save that to an image.
- **The Docker Registry:** The people behind Docker host a large collection of software that you can install using docker pull. This service is called the Docker registry. You can search it using docker search <search term> or browser it online at <https://registry.hub.docker.com>
- **Dockerfile:** A Dockerfile is text file that serves as a recipe for building images. It starts by defining a base image it will build on, and then installs additional tools, and adds / removes / modifies files in it to get it to the state one wants.

Conclusion

Docker is an immensely useful and powerful tool that has changed the software can be deployed. At just version 1.5 (as of this writing) it has already accumulated powerful tools and features and inspired an entire community of tools and software around it. There are even lightweight operating systems designed around Docker as a means of installing and running software.

Of late Docker has gained even more features such as the ability to orchestrate and entire cluster of Docker containers and link them together. Whether Docker itself is here 10 years from now or not we can't say, but the concepts it has unleashed are here to stay, and are likely to become even more central to Linux in the future.

So head over to docker.com now and figure out how you can get it up and running on your system. >

Pulling the plug

>>Google Code is shutting down, and here are the alternative project hosting services that you should consider migrating to>

Google's Open Source Blog recently announced that they are shutting down Google Code. Launched back in 2006, coders and developers hosted their open source initiatives and projects here, taking advantage of the reliability offered by this

only (only download, view project source, but no changes) and by 25 January, 2016, the hosting service will be completely closed down (you will still be able to download a tarball of your project sources throughout the rest of 2016).



Google Code will be shutting down on 25 January, 2015

service. And since then, many other project hosting services kept coming that were not only better but also made it easier to host and collaborate on projects.

The decision to shut down the service came after they found most of the remaining projects hosted on Google Code to be either spam or abuse, and a large part of the administrative load was spent on abuse management. So to begin with, they have disabled the creation of new projects. On 24th August, 2015, the projects will go read-

If you have your projects hosted on Google Code, there are tools that make it easier to migrate your projects to other hosting services which you can check out from the following link <http://dgit.in/GoogCoDeMigr>. Among the good ones, here are a few that you might want to consider checking out.

GitHub

GitHub is clearly the most popular code and project hosting service out there. GitHub caters to the needs of both individual developer communities as well as enterprises hosting their software. The service is free for basic users and at a few dollars per month, it provides many professional features also. In their official announcement of the shutdown notice, Google even mentioned GitHub and about its exporting tool.

SourceForge

Another popular alternative to host your projects, SourceForge is now managed by a group of volunteers and admins who love the service. It sees many highly popular open source projects and software that are still based on this service, since it offers efficient issue tracking and management of different versions of your projects. But currently users have been reporting adware being bundled in all of its installers, making it really hard to consider. SourceForge also has an exporter tool for Google Code.

Bitbucket

Bitbucket offers a free service with access to infinite cloud repositories so that you can go about building your own project with a plethora of available resources. It is free for up to five users, and the service intends to provide its features to people working for projects in a team — startups and smaller organisations and not exactly for individual developers. The service consists of Jira, a popular issue tracking software made by the same team behind Bitbucket. Again, Bitbucket has a migration tool to export your projects from Google Code. >

*coding news



*Swift on iPhone

>>With over 200 tutorials on Swift, you can learn the new programming language right from the basics on Swift, an app available on the iPhone.

<http://dgit.in/SwiftyApp>



*Best languages for Linux

>>With Python taking the top place followed by C++, according to a survey these are the best programming languages for Linux developers

<http://dgit.in/BestProgLang>



*Scala.js is ready

>>After two years in development, Scala.js is now production-ready and the experimental flag has been lifted.

<http://dgit.in/Scala.js>

Price Watch

Prices of tech products fluctuate quite a bit. Find out the latest prices of RAMs, IEMs, and portable hard drives.

Killer Rigs

If you're looking to assemble a PC for yourself or someone else, we have you covered. Seriously.

All-in-One Desktops

In their second coming, the AIOs seem to be back with a vengeance. Should you blink and buy one finally?

Agent 001

agent001@digit.in

Who says desktops are dead? Sure more people are buying laptops than good old desktops of old, and more people are buying smartphones than laptops and desktops combined, don't write off them AIOs just yet. All-in-one desktops are back in vogue, and the manufacturers aren't sitting down silently on this resurgent wave, aiming to throw everything and the kitchen sink at consumers to convince them to buy an AIO. And you know what? I like the fact that these brands are trying hard this time around, because the effort they've put into some of these AIOs on sale is proof that the category is alive and kicking with action.

Portable AIOs or Giant slates?

The all-in-one PCs circa 2015 are going to be nothing compared to some of the AIOs that you saw some years ago, and this is a direct influence of the rising smartphone and tablet trend. Like any other technology segment, the AIOs have also evolved and have improved significantly, and this clearly shows. Remember one of my perennial requests, to have an AIO with a dedicated battery built-in? Voila! It's now a reality, thanks to a few handful daring brands, one of which is Dell -- and

Jayesh has reviewed this 20-inch slim AIO with multitouch screen and a dedicated battery pack built-in. It's been a long wait for dream to turn into consumer electronics reality, but hey better late than never. Such innovative products (re: AIOs, what else?) are sure to attract consumer interest, especially the ones who want to chuck out their aging, old PC tower and replace it with something sleek, sexy and something that loosely resembles a modern computing device. The touchscreen helps as an initial wow-factor and adds the novelty of a tablet into your AIO's screen itself, which is a nice added bonus. By enabling these devices to run off built-in battery packs adds to their utilitarian value, because they serve a great purpose in most Indian households outside major cities and suburbs which don't get continuous power supply. Say goodbye to that old UPS as well! Whether giant slates or portable PCs, whatever it is the AIO has transformed into currently, it's nice.

Things that matter

There are only two things that matter when it comes to purchasing an AIO. Screen and hardware. Whether you want to buy an 18-inch form factor machine

with non-HD resolution for office use or a 27-inch iMac with QHD resolution and eye-popping brilliance for your home entertainment needs, or something in between, there's no discounting the importance of screen size and screen quality when it comes to deciding which AIO to buy. Whatever you choose to buy, my only advice to you is to not attach too much importance to an AIO's touchscreen -- because it's not a feature you'll be using day in day out (unless you have kids or old folk at your home). The novelty of a touchscreen dies down very quickly, and hinging your decision on this rather unimportant aspect of a multi-faceted machine can only lead to disappointment if nothing else.

Pay close attention to an AIO's internal hardware. Most AIOs launching in the market don't come with the latest and greatest CPU and graphics combo, but



Recommended Buys

From the best smartphone to ultrabooks, GPUs and IEMs, we recommend the right products for you to buy



Net Neutrality


The FCC recently released complete rules surrounding net neutrality and you can take a look at all of them here: <http://dgit.in/FNeutNet>

Benefits of AIO

- **Cool quotient:** While I agree that beauty's largely in the eyes of the beholder, anyone who doesn't agree with AIOs being cooler, sexier, more appealing on the eye compared to a traditional desktop PC tower has seriously lost touch with reality.
- **Saves space:** If you buy an all-in-one PC, you don't need too much space, as most of them are slim, space-saving, one-piece boxes that fit in just anywhere really.
- **No separate monitor:** The whole funda about an AIO is that it does away with having a separate cabinet and monitor, as the two are fused together into a single unit. Voila!
- **No extra wires:** Most AIOs come with just one power adapter cable. With wireless keyboards and mouse, you just don't have to deal with all that cable clutter anymore. Hurray!
- **Power and heat:** Almost all AIOs are based off laptop components (in terms of CPU, RAM, graphics, hard drive, etc), and thereby emit less heat and consume lesser power compared to full-tower traditional desktops.

with Pentium, Celeron and low-powered Intel Core processors. The reason for this is clear – save power. Also the demands placed on an AIO aren't the same as a traditional desktop (which can be geared towards gaming, high quality entertainment by virtue of upgrading its internals or adding up external accessories) – at least that's what the manufacturers' consensus seems to be at the moment. So if you're expecting AIOs purchased off the shelf to be anything more than basic computing devices with a certain amount of multimedia potential, you're in for disappointment again – unless you're paying over ₹50k for your machine. You can't upgrade a lot in there, but if you can, I recommend buying an AIO with built-in SSD inside – or upgrading its HDD to an SSD. That itself will give your AIO a much needed boost. The Apple's iMac is still the most grand, most powerful consumer AIO out there (and I'm not counting out workstation grade professional AIOs sold by HP or Lenovo here), and it will burn a sizable hole through your pocket if that's your aspiration. But the most innovative AIOs are available at the budget segment, under Rs. 30,000, and that's where you should look for the exciting stuff.


Brands to watch out for

At this point in time, I know HP, Dell, Apple, ASUS have already launched their latest AIOs in the market. More brands are expected to launch devices in this segment, and you should consider buying them if you want to replace your old desktop with something more contemporary, functional, useful and utilitarian. 

Q Needed: Corel Draw machine

This is first time I am writing to you. I am a local computer dealer, so you my technology navigator. I like price watch, killer rigs, product reviews and the software on the DVD but the Fast Track is the best. I want you to suggest a system configuration for my client, who is a graphic designer and specially working on Corel Draw. My client's budget is 40k and he doesn't need a monitor. It means you need to exclude monitor. Thanks!

–Juber H. Momin

 Hi Juber and thanks for writing in. It's good to know that you enjoy the content and Digit helps you out while you make your tech decisions. As far as building a PC primed for designers who use Corel Draw is concerned, the budget that your client has for it is just enough. But you should know that an original copy of the latest Corel Draw X7 Graphics Suite costs \$499 or ₹31,000. If your client already has bought a licensed copy of the same then you're sorted. Since you haven't mentioned whether this client has any preferences when it comes to selecting components from particular brands, we'll list out what we think would suit best and provide for some headroom for future upgrades. Have a look:


- **Processor:** AMD FX6300 - ₹7,200
- **Motherboard:** Gigabyte GA-970A-D3SP - ₹6,750
- **RAM:** G.Skill Sniper 8 GB (2 x 4 GB) PC DRAM (F3-12800CL9D-8GBSR) - ₹5,800
- **Graphics Card:** Sapphire Radeon R7 260X 2 GB - ₹9,970
- **SSD:** Samsung 840 Evo 120GB - ₹4,900
- **Hard Drive:** WD Caviar Green 2TB WD20EZR - ₹5,850
- **Power Supply:** Antec VP550P 550 Watts - ₹3,890
- **Cabinet:** NZXT Gamma - ₹2,490

Q Hunt for gaming headphones

Hello Agent 001! My name is Mehtaj and I would like you to suggest me a good headphone with mic. My budget is around 1k, I will mainly use it for gaming. I looked around and found

Lenovo gaming headset (P950) on Snapdeal for ₹937. So I would like your opinion on this or suggest me if you find a better one. Thanks in advance.

–Mehtaj

 Hi Mehtaj! Sadly, we've never tested that particular headset and can't comment on the quality. We would suggest that you save up a bit and go for the Steelseries 4H Spectrum (<http://dgit.in/1MNOsXZ>) for around ₹1,500 simply because Steelseries has a well earned reputation for making quality headsets. Better yet, purchase the headset from Amazon.in. If you don't like it, you can return it within 30 days and experiment with some other sets till you find one that suits your taste. If you get a standalone mic, we would recommend the Sennheiser HD201 or HD202.

Q Ultimate PC dream

Dear Agent001, I've finalized below components for my Rig:-

- Intel core i7 4790K Processor
- Gigabyte GA-Z97X-Ud5H-Bk / MSI Z97 Gaming 7
- Corsair XMS3 DDR3 4 GB (1 x 4 GB) PC DRAM



Radeon R9 390X leaked

The upcoming flagship card will have really powerful specifications it seems: <http://dgit.in/390XSpecs>

(CMX4GX3M1A1600C9) clubbed with G.Skill Sniper F3-12800CL9D-8GBSR

- Sapphire AMD Radeon R9 290 Tri-X
- Corsair Hydro Series H100i Extreme Performance CPU Cooler
- WD Caviar Green 2 TB Desktop Internal Hard Drive
- Corsair Carbide 400R CPU Cabinet
- Corsair RM 750 PSU

Please help me with few suggestions that I've about above Rig:-

1. Is the above configuration future proof for ultimate gaming. It should not have BSOD or not run into technical difficulties.
2. Which motherboard is the best performer? Please suggest me best one.
3. I've taken Corsair Carbide 400R CPU Cabinet into consideration as NZXT Source 530 is not available in Pune. Please suggest if Corsair model is good choice or not for the configuration that I've been working on?
4. Good Gaming Keyboard & Mouse combo preferably from Logitech. I've chosen Logitech Gaming Keyboard G105 & Logitech G602 Wireless Gaming Mouse. Shall I go with these or something else?
5. Above configuration will cost me around Rs. 80K whereas I can get Xbox One in Rs. 45K from Amazon.in. Please suggest whether I should go for PC gaming configuration or I should get console as its cheaper. Please let me know what is the difference and which one is future proof. For one thing, I know that PC games are much more cheaper than console one.

—Satyadeep Tiwari

A Hey Satyadeep, let's go through your questions one by one.

1. Future proof? No. Pretty much the very next CryEngine game is going to kill your machine at the very maximum settings. Games these days tend to be taxing on systems with 2-3 graphics cards in SLI or CrossFireX when you amp up everything. But this is something that you'll only experience with a very few games that come out each year. Also, throwing in more graphics cards gives you a lesser value for your money. As for the BSOD thing, that comes down to the hardware as well as the software and the "human" variable. So no dealer is every going to guarantee that a machine will never get a BSOD and neither are we.
2. When it comes to motherboards, performance is not a factor. As long as you're within the median price range the choice of your motherboard is governed by all the features that you desire from your system. You can have an entry level Z77 motherboard for 6K and you can have a high-end Z77 motherboard for 40K. The difference in performance is generally at 1-2%.
3. The Corsair 400R is a pretty good cabinet for your configuration. The only point of contention seems to be the graphics card which is 305mm and the clearance in the cabinet is 318mm which is a squeeze but it's still fine.
4. You can go with any keyboard and mouse combination that you are comfortable with.
5. Consoles are nowhere close to the what this rig is capable of. A console may be cheaper at first but each game costs 3-4 times that of a PC copy. Also with deals that you get for PC games, consoles don't even stand a chance. **d**

GAME DEV GRADS ARE ALWAYS IN DEMAND

The video game industry has always been competitive. Only the best ideas and designs bring actual value to the busy bays of a game studio. In this scenario, talent is obviously required, but experience is appreciated more.

While the above is true, games also need a fresh pair of eyes on them and ideas that come from someone not thinking of the constraints. This, among other reasons, is why game studios hire new talent. Whether said talent has relevant experience or not, is another matter entirely.

DSK's game dev alumni enter the industry with a fresh perspective and the capability to hit the ground running on improving existing games or building great games from their first day on the job. The studio's top employees save valuable energy to focus on the bigger picture while those with a formal education in development need no training in deadlines, quality, faster processes etc. The industry needs such self-starting game developers who can simply contribute regardless of the energy other members of the team operate with.

Shigeru Miyamoto makes enjoyable games, and the industry believes him when he says "The obvious objective of video games is to entertain people by surprising them with new experiences". A studio needs somebody capable, who has established a track record of recognizing things that siphon fun out of the game. Those things will go away before the deadline.

Fortunately, DSK's game development course alumni are trained to work in a studio. They're well-versed with all the pressures a team of professionals goes through since their games are reviewed at the end of the final year as finely as the press would dissect it. This adds to their ability to maintain their calm not only when faced with a challenge but also when interacting with the media or gamers themselves directly.

The team behind League of Legends, Riot Games, benefits constantly from rotating their key roles and bringing interns into their e-sports, mechanics and optimizations teams. Gran Turismo 5, on the other hand, could have been a success if Sony focused on making the game fun. Fun games are made when its makers are enjoying themselves. It helps to experience development cycles before setting foot in the industry, so if you're a game dev graduate or someone faced with hiring one — consider this degree a validation for being in the industry.

For more info on how to realize your dream of studying game development, visit www.dsksic.com or email at info@dsksic.com



Fresh perspectives are always in demand in the gaming industry



Mi Nexus iPad

Check out our comparison of three of the hottest tablets on the market - the Xiaomi Mi Pad, Nexus 9 and Apple iPad Mini 3 http://dgit.in/Pad_C



IoT for your bathroom

A DIY project shows how you can convert a regular toothbrush holder into an IoT device. Head here: <http://dgit.in/IoTBathroom>

SPEND SMART

Is it about time you upgraded your RAM? Or maybe you want a good IEM for your daily commute? We've got you covered.



RAM

Brand	Series	Model ID	Data Rate	Capacity	Frequency	Channel (Kit)	Price (in ₹)
Desktop							
G.Skill	Sniper	F3-12800CL9D-8GBSR	DDR3	8 GB	1600 MHz	2x4GB	5,800
Corsair	Vengeance	CMZ4GX3M1A1600C9	DDR3	4 GB	1600 MHz	1x4GB	6,313
G.Skill	RipjawsX	F3-14900CL10S-8GBXL	DDR3	8 GB	1866 MHz	1x8GB	6,699
Kingston	HyperX Savage	HX321C11SR/8	DDR3	8 GB	2133 MHz	1x8GB	6,950
Crucial	NA	CT8G4DFD8213	DDR4	4 GB	2133 MHz	1x4GB	6,999
G.Skill	RipjawsX	F3-17000CL11D-8GBXL	DDR3	8 GB	2133 MHz	2x4GB	7,500
Crucial	NA	CT8G4DFD8213	DDR4	8 GB	2133 MHz	1x8GB	9,229
Corsair	Vengeance Pro	CMY8GX3M2A2400C11	DDR3	8 GB	2400 MHz	2x4GB	9,799
Corsair	Vengeance	CMZ16GX3M2A1866C10	DDR3	16 GB	1866 MHz	1x16GB	12,999
Transcend	NA	JM1333KLN-4G	DDR3	4 GB	1333 MHz	1x4GB	13,475
Corsair	Vengeance Pro	CMY16GX3M2A1600C9	DDR3	16 GB	1600 MHz	2x8GB	13,499
G.Skill	RipjawsZ	F3-12800CL9Q-16GBZL	DDR3	16 GB	1600 MHz	4x4GB	15,400
Corsair	Vengeance	CMZ4GX3M1A1600C9	DDR3	4 GB	1600 MHz	1x4GB	15,696
Corsair	Vengeance Pro	CMY16GX3M2A2400C11A	DDR3	16 GB	2400 MHz	1x16GB	16,999
G.Skill	TridentX	F3-2400C10D-16GTX	DDR3	16 GB	2400 MHz	2x8GB	17,999
G.Skill	Ripjaws 4	F4-2400C15Q	DDR4	16 GB	2400 MHz	1x16GB	24,900
Corsair	Vengeance	CMK16GX4M4A2666C16R	DDR4	16 GB	2666 MHz	4x4GB	28,500
G.Skill	RipjawsX	F3-1600C9Q-32GXM	DDR3	32 GB	1600 MHz	4x8GB	28,500
Kingston	HyperX Predator	HX421C13PBK4/16	DDR4	16 GB	2133 MHz	1x16GB	29,999
G.Skill	Ripjaws 4	F4-2400C15Q	DDR4	32 GB	2400 MHz	1x32GB	49,500
G.Skill	Ripjaws 4	F4-3000C15Q2	DDR4	32 GB	3000 MHz	8x4GB	54,249
Corsair	Dominator Platinum	CMD64GX3M8A2400C11	DDR3	64 GB	2400 MHz	8x8GB	80,850
G.Skill	Ripjaws 4	F4-2800C15Q2	DDR4	64 GB	2800 MHz	8x8GB	94,096
Laptop							
G.Skill	Ripjaws	F3-1866C10S-4GRSL	DDR3	4 GB	1866 MHz	1x4GB	3950
Corsair	Vengeance	CMSX4GX3M1A1600C9	DDR3	4 GB	1600 MHz	1x4GB	3999
Crucial	NA	CT102464BF160B	DDR3	8 GB	1600 MHz	1x8GB	5,690
Adata	Premier	ADD51600W8G11-B	DDR3	8 GB	1600 MHz	1x8GB	5,700
Corsair	Vengeance	CMSX8GX3M1A1600C10	DDR3	8 GB	1600 MHz	1x8GB	6,299
G.Skill	Ripjaws	F3-2133C11S-8GRSL	DDR3	8 GB	2133 MHz	1x8GB	6,999



New Xolo on the block

Xolo introduced its new LT2000 4G smartphone in the country with a budget price tag of ₹9,999 <http://dgit.in/XoloLT2000>



Palit GTX 960 JetStream 4GB

Palit announced the availability of the 4GB edition of its GTX 960 JetStream with a factory overclock of 1127 MHz http://dgit.in/Pal_960

Price Watch



IEMs

Brand	Model	Impedance	Frequency Response	Driver Size	Price (in ₹)
Audio Technica	ATH-CLR100	16 ohms	20-25,000 Hz	8.5 mm	699
Sennheiser	CX 180	16 ohms	20-20,000 Hz	NA	859
Cowon	EM1	16 ohms	20-22,000 Hz	10 mm	895
SoundMAGIC	PL21	12 ohms	15-22,000 Hz	9 mm	1,050
JBL	T100A	16 ohms	20-22,000 Hz	8 mm	1,098
Tekfusion	Twinwoofers	16 ohms	19-21,000 Hz	10 mm	1,320
JVC	HA-FX101	16 ohms	5-20,000 Hz	8.5 mm	1,449
JVC	HA-FR37-B	16 ohms	8-20,000 Hz	11 mm	1,499
Sony	MDR - XB30 EXBCE	16 ohms	4-24,000 Hz	13.5 mm	1,665
Audio Technica	ATH-CK313M	16 ohms	20-23,000 Hz	8.8 mm	1,699
SoundMAGIC	E10	16 ohms	15-22,000 Hz	10 mm	2,175
JBL	Synchros E10	32 ohms	10-20,000 Hz	9 mm	2,799
Audio Technica	ATH-CKX9	32 ohms	5-25,000 Hz	13.5 mm	4,230
Sennheiser	OCX 685i Sports	16 ohms	18-20,000 Hz	NA	5,990
Cowon	EH2	32 ohms	20-22,000 Hz	NA	14,500



PORTABLE HARD DRIVES

Brand	Model	Capacity	USB 3.0	Size	Warranty	Price
Toshiba	Canvio E05A100BBU2AK	1 TB	No	2.5 inch	3 years	4,375
Western Digital	WD Elements	1 TB	Yes	2.5 inch	3 years	4,423
Sony	HD-E1/SC	1 TB	Yes	2.5 inch	3 years	4,628
Transcend	TS1TSJ25H3P	1 TB	Yes	2.5 inch	3 years	4,684
Seagate	STAX1000302	1 TB	Yes	2.5 inch	3 years	4,940
Western Digital	WD My Passport	1 TB	Yes	2.5 inch	3 years	4,940
Seagate	Backup Plus Slim	1 TB	Yes	2.5 inch	3 years	5,005
Adata	DashDrive HD710	1 TB	Yes	2.5 inch	3 years	5,150
Verbatim	53023	1 TB	Yes	2.5 inch	3 years	5,399
Adata	HV620	2 TB	Yes	2.5 inch	3 years	6,934
Silicon Power	ARMOR A15	2 TB	Yes	2.5 inch	3 years	7,191
Western Digital	WD My Passport	2 TB	Yes	2.5 inch	3 years	7,650
Toshiba	HDTB320AK3CA	2 TB	Yes	2.5 inch	3 years	7,884
Seagate	STBX2000401	2 TB	Yes	2.5 inch	3 years	7,973
Transcend	TS2TSJ25M3	2 TB	Yes	2.5 inch	3 years	7,999

■ Basic rig = ₹24,406 ■ HTPC = ₹31,371 ■ Entry-level gaming = ₹48,027 ■ Mid-range gaming = ₹61,737 ■ Ultra high-end = ₹2,42,699 ■ Digit Test Rig = ₹2,46,474

BASIC RIG

Processor	Intel Pentium G3240	3,090
Motherboard	Gigabyte GA-H81M-S1	3,190
RAM	Kingston ValueRAM 2 GB 1333MHz	1,390
HDD	Toshiba 500GB DT01ACA050	3,050
Monitor	Dell E2014H 19.5 inch LED	6,250
Graphics Card	None	0
Cabinet	NZXT Gamma	2,499
PSU	Corsair VS450	2,228
Speakers (2.1)	Creative SBS A120	1,219
Optical Drive	Samsung SH-224DB/IDDS	950
Mouse	Amkette Ash Black (Bundle)	540
Keyboard	Amkette Ash Black (Bundle)	0
Sound Card	None	0
Total		₹24,406

HTPC

Processor	AMD A8-6600K	7,124
Motherboard	MSI FM2-A75MA-P33	4,490
RAM	G.Skill RipjawsX DDR3 2 GB (2 x 2 GB) PC RAM (F3-12800CL9D-4GBXL)	4,100
HDD	Western Digital WD30EZRX 2TB	7,480
Monitor	None (your TV)	0
Graphics Card	None (HD7560D onboard)	0
Cabinet	Cooler Master Elite 120 Advanced	2,977
PSU	Corsair VS350	2,050
Speakers	None	0
Optical Drive	Samsung SH-224DB/IDDS	950
Mouse	Microsoft Desktop 2000 wireless combo	2,200
Keyboard	Bundled	0
Sound Card	None	0
Total		₹31,371

ENTRY-LEVEL GAMING

Processor	AMD FX8320	9,590
Motherboard	Gigabyte GA-970A-DS3P	5,290
RAM	ADATA Premier DDR3 4 GB (2 x 2 GB) PC RAM (AD3U1333B2G9-R)	2,780
HDD	Seagate Barracuda 1TB	3,200
Monitor	Dell S2240L	8,381
Graphics Card	Gainward GTX 750 Ti 2 GB	9,490
Cabinet	NZXT Gamma	2,499
PSU	Cooler Master Thunder 450W	2,660
Speakers	F&D F680	2,647
Optical Drive	Samsung SH-224DB/IDDS	950
Mouse	Amkette Ash Black (Bundle)	540
Keyboard	Amkette Ash Black (Bundle)	0
Sound Card	None	0
Total		₹48,027

MID-RANGE GAMING

Processor	Intel Core i5-4440	10,690
Motherboard	ASUS B85M-G	5,989
RAM	Gskill RipjawsX F3-12800CL9D-8GBXL (2 x 4GB)	5,950
HDD	Toshiba 1TB DT01ACA100	3,650
Monitor	Dell S2240L	8,381
Graphics Card	ZOTAC GTX 660 192-bit 2 GB	12,800
Cabinet	Thermaltake Versa H21	2,730
PSU	Seasonic S12II 620 Watts	5,620
Speakers	F&D F680	2,647
Optical Drive	Samsung SH-224DB/IDDS	950
Mouse	CM Storm Devastator (Bundle)	2,330
Keyboard	CM Storm Devastator (Bundle)	0
Sound Card	None	0
Total		₹61,737

ULTRA HIGH-END GAMING

Processor	Intel Core i7-4790K	20,690
Motherboard	ASRock Z97 Extreme6	14,999
RAM	Corsair Vengeance 16GB (CMY16GX-3M2A1866C9B)	13,499
HDD	WD WD30EZRX 3TB + Samsung 850 Pro 256GB SSD	20,679
Monitor	ASUS PB287Q 4K UHD	49,499
Graphics Card	ZOTAC GTX 980 ZT-90201-10P Standard	44,975
Cabinet	NZXT Phantom 820	17,489
PSU	Antec HCP-1000 Platinum 1000W	15,299
Speakers	Logitech Z906 5.1	18,571
Optical Drive	LG Blu-ray WH16NS40 RW	5,690
Mouse	Razer Death Adder 2013	2,999
Keyboard	Corsair Vengeance K70	8,460
Sound Card	ASUS Xonar Phoebe	9,850
Total		₹2,42,699

PRIMARY DIGIT TEST RIG

Processor	Intel Core i7 - 4960X (Extreme Edition)	66,188
Motherboard	ASRock X79 Extreme 9	28,499
RAM	Corsair Dominator 2133MHz (8GB x 4) (CMD32GX3M4A2133C9)	48,500
HDD	Toshiba DT01ABA100V	3,695
SSD	SanDisk Extreme II 240GB (x2 for HDD testing)	24,980
Graphics Card	Gigabyte GTX 960 G1 Gaming	19,314
Cabinet+ Cooler	Cabinet (NA) + Intel RTS2011LC - Stock AIO	NA
PSU	Corsair HX1050	16,291
Monitor	BenQ GL2460HM	10,500
Optical Drive	NA	NA
Mouse	Razer Ouroboros Elite	11,100
Keyboard	Tt eSPORTS Poseidon Z	7,907
Sound Card	ASUS Essence STX	9,500
Total		₹2,46,474

digit RECOMMENDED BUYS

From smartphones to graphics cards, here's what we recommend for your next purchase!



TOP 3 BUDGET SMARTPHONES

Brand	Model	Price (in ₹)
Motorola	Moto E (2nd Gen 3G)	6,999
Lenovo	A6000	6,999
Xiaomi	Redmi 2	6,999



TOP 3 BEST SMARTPHONES

Brand	Model	Price (in ₹)
Apple	iPhone 6	62,500
Samsung	Galaxy Note 4	49,999
Motorola	Moto Turbo	41,999



TOP 3 GAMING LAPTOPS

Brand	Model	Price (in ₹)
Lenovo	Y50-70	77,590
MSI	GE60 2PE	1,21,260
ASUS	G551JK-DM053H	81,500



TOP 3 ULTRABOOKS

Brand	Model	Price (in ₹)
Acer	Aspire S7-392	84,390
Toshiba	Portege Z30t-A	1,00,000
Lenovo	X1Carbon 208A	1,83,999



TOP 3 BUDGET GRAPHICS CARDS

Brand	Model	Price (in ₹)
Gainward	GTX 750Ti 2GB	9,490
ZOTAC	GTX 660 192-bit 2GB	13,750
Sapphire	Radeon R7 265 2GB	10,990



TOP 3 BEST GRAPHICS CARDS

Brand	Model	Price (in ₹)
ZOTAC	GTX 980 AMP! Extreme Edition	58,990
ZOTAC	GTX TITAN Z	2,35,599
Sapphire	Radeon R9 295X2	1,28,750



TOP 3 BUDGET TABLETS

Brand	Model	Price (in ₹)
ASUS	Fonepad 7 (WiFi + Cellular)	10,285
Apple	iPad Mini (16GB WiFi)	14,938
Xiaomi	MiPad	12,999



TOP 3 BEST TABLETS

Brand	Model	Price (in ₹)
Lenovo	Yoga 2	27,990
Samsung	Galaxy Tab S 10.5	41,500
Apple	iPad Air 2 (16 GB WiFi + Cellular)	41,899



TOP 3 BUDGET TO MID RANGE IEMS

Brand	Model	Price (in ₹)
Cowon	EK2	1,350
JBL	Synchros E10	2,030
SoundMagic	E10	2,099



TOP 3 GAMING HEADPHONES

Brand	Model	Price (in ₹)
Razer	Kraken 7.1	8,650
Kingston	Hyper X Cloud	6,300
SteelSeries	Siberian V2	6,995

Tab for some serious kidding around

A new trend is emerging, that of tablets for kids as educational and entertainment devices. We test the first few devices spearheading this wave in India.



Jayesh Shinde
jayesh.shinde@digit.in

All pervasive technology is getting really all-pervasive. And what we

do invariably has an impact on people in our surrounding, including young, impressionable kids that mimic adult behavior. Notice how tiny toddlers will copy what adults do? If you call or talk to someone

on the phone, they will do just that. Next thing you know, every time your phone rings, you're fighting with children in the house to get control of your phone. When you're playing Fruit Ninja or Angry Birds on

the tablet, kids want to snatch the slate from your hands and have a go at these finger swiping games too.

One of the boons of the digital era that we currently live in is extreme customization of



The new Benz concept

Mercedes pulled the wraps off its new self-driving concept car - the Mercedes Benz F 015 <http://dgit.in/BenzF015>



TAG Heuer and Intel

An ultimate luxury smartwatch was created when veteran watch manufacturer - TAG Heuer teamed up with Intel and Google <http://dgit.in/TagIntel>

Kids Tablets



increase the quality of goods or services being offered by manufacturers and consumed by interested parties.

In the following few pages, we take an up close and personal look at the world of kids tablets - what are some of their advantages and what are some of their obvious drawbacks. Should parents even be interested in buying tablets that are so niche and expensive? And what makes these tablets greater or better than iPads or large-screen Nexus devices? All that and more as we take a look at each of these tablets one by one.

Mosti Chhota Bheem Tablet

Dubbed as an Android tablet for kids, the MOSTI Chhota Bheem Tab also doubles up as a pretty good learning device for tiny tots aged 3 years and above. It's a 7-inch tablet reinforced in a strong plastic enclosure, and the manufacturers ensure the retail packing is even more reinforced in bubble wrap and extra padding. It's built well, like all Kids tablets in our comparison test here.

The Chhota Bheem Tab has a nice chunky bezel all around its screen to ensure kids can get a good grip of the tablet. What's more, although MOSTI doesn't advertise the fact, the tablet is pretty well built to survive accidental knocks / shocks. We dropped it from a 3-foot high table multiple times, while the tablet was ON, and it survived the drop without any visible damage. Kid-proof enough, we think. It has a standard 3.5mm audio jack, mini-USB port, screen lock, and SD card slot - the only tablet to have a full scale SD card slot, as every other tablet could only manage a microSD card slot. The screen lock is a good idea if you want

to put on a video and give it to a toddler who won't be able to accidentally stop playback.

The MOSTI Chhota Bheem Tab is meant to be used in portrait mode, as it has volume buttons (on the left) and Menu buttons (on the right) placed on either side of its 7-inch screen. Of course it can also be used in landscape as and when an app demands it.

The volume buttons and menu buttons have a nice clickety-clack feel. They aren't precision-cut, like the buttons you're used to seeing on mid-to-high-end phones or tablets, but they're large and bold, which makes it easy for kids to use them without a hitch.

ensuring kids are exposed to the right content for their age, with adequate supervision. The tablet doesn't come with Google Play Store built in for this very reason. The tablet boots into this UI and it can't be exited without a password (which is set by the parents).

The KIDO'Z app also ensures that the parent controls the tablet through an admin account, and the kids using the MOSTI Chhota Bheem Tab always log into a separate user account which is easy to supervise and control. The OS allows you to have as many user accounts as you wish.

What's important about this tablet is that MOSTI has the



Mosti Chhota Bheem Tablet

The Chhota Bheem Tab also comes with a 2MP rear camera for shooting photos and videos. It's not great, but it will do, especially if you're a 3-year-old kid - its intended user. The backpanel is encased in the same hard plastic jacket that surrounds the tablet's screen bezel, and it exudes immense confidence as far as build quality is concerned.

The tablet runs the KIDO'Z (pronounced as "KID OS") app that's built into the Android Jellybean OS of the MOSTI Chhota Bheem Tab. KIDO'Z has its own curated app store,

license to market the Chhota Bheem brand, which is such a huge kids favorite these days. If your kid sees it somewhere though you may not have much of choice in the matter, since Chhota Bheem (the character) has now become a kiddie favourite!

Intel Eddy Tablet

If you live in a house with children over 18 months old, or are thinking of giving your very young niece or nephew a proper birthday present, give them the gift of Eddy and introduce them to the path that leads

services and products to appeal to a specific set of audience or consumers. And the stuff targeted at kids these days ranges not only from TV shows and toys, but also digital products like tablets.

Granted the world of tablets for kids is still in its infancy (no pun intended), but we have no doubt that the massive strides it has taken in the in recent months will only stand to



Hello push notifications

The recent beta build of Chrome - Chrome 42 now comes with smartphone like push notifications feature <http://dgit.in/PushChro>

Prime for apps?

If reports are to be believed, Amazon is now working on a Prime feature for its apps subscription service <http://dgit.in/AppPrime>

HOW WE TESTED

Testing these Kids tablets wasn't as simple as testing regular tablets. Purely because of a couple of factors – custom skin on top of base Android Jellybean which made running a lot of benchmarks virtually impossible. For instance, we couldn't get PC Mark for Android to run on all these Kids tablets, try as much as we did. Therefore we had to rethink the synthetic benchmark sheet we normally deploy for testing traditional tablets and tweak it a bit to ensure we only considered benchmarking software that was able to run across all these devices.

Synthetic benchmarks: We ran all synthetic benchmarks at factory settings. For testing CPU and GPU performance, we ran a whole host of browser tests that rated the device's processor and graphics engine. We also managed to run AnTuTu and Quadrant tests on all the devices, thereby making the disappointment of not being able to run Futuremark benchmarks (our most widest range of industry-standard benchmark suite) a lot more palatable. For testing all the tablets' display quality, we made use of a Konica Minolta lightmeter to test individual screen brightness. We also rated every tablet's audio quality and volume levels.

Features analysis: This section of the testing includes a lot of research and verification of

internal hardware claims. The point is to check if all these devices really have the hardware they claim. Wherever possible, we installed AIDA64, an in-depth hardware analysis app for Android that tells you an Android device's hardware in intricate detail. What's the CPU, how many cores, how much internal storage, and other such details. We also took a look at things like the tablet's screen size, display resolution, weight, operating system, connectivity ports, and other physical aspects of the tablets that don't necessarily involve benchmarking or performance testing.

Build and design: While a product's build quality and design highlights are largely dictated by subjective tests (beauty's in the eye of the beholder, remember?), still there are minimum standards that can be arrived at for objectively classifying Device A's build and design characteristics to be better than Device B's, for instance. In this area of our testing, we take into account factors like plastic shell of the tablet – is it just regular plastic or is it reinforced (either by a rubber layer or extra plastic layer) to lend the tablet better build quality. Does the tablet have bigger buttons? Kids need bigger buttons to be able to press them easily (kids are clumsy, yes). What sort of preinstalled, unique

apps and software do these tablets come with to be able to attract a kid's attention? This could be both educational or entertainment software.

Drop test: Again, this isn't something that we do every time we review a tablet. But for Kids Tablets, we reckoned a drop test was an essential thing to have. This is what we did, essentially – we kept each and every tablet we received for the purpose of this test and we kept them on a table whose height measured 3.5 feet from the ground. Without extra force or any added fanfare, we let the tablets slip and "fall" of the table's edge – not one or two times but a total of 10 times. That means 10 falls for each and every tablet. We are glad to report that all tablets survived this test, which is a great story in itself.

Final rating: After taking into account price, we rate performance, features and build by assigning them weights out of 100. And that's how we arrive at our final score. The Best Performing tablet is the one which topped the scores under the performance tests, while the Best Value tablet is the one which gives you the best bang for your buck. The Editor's Pick is decided subjectively by looking at all the scores and rewarding it to a device that had something extra to it, an X factor that other tablets in the comparison lacked.

to tech acumen and more. With game-based learning clearly becoming the future of education, apps for children have an ever-growing market because the children they are targeted towards have an insatiable appetite for content and keep their attention. Eddy offers kids a solution to both their needs, and peace of mind to parents struggling to understand which is the right introductory tablet for their wards.

If you were always apprehensive about giving your smartphone or tablet into your child's hands, not because you know it would be smashed to bits but also because of the effect and negative influence it was causing in a child's development, by getting exposed to

inappropriate content on the Internet – worry no more. Eddy claims to be the first Android-based learning tablet for kids and has been designed by educators. Its content

is linked to school curriculum, and a child can read books, learn to play musical instruments and also practise mathematics through games on the device. How?



Intel Eddy Tablet

Because Intel has paired up with Delhi-based education startup called Metis Learning to curate content, supervise and ensure kids are exposed to the right content, and encouraged to learn through interactive games and apps.

Eddy is a seven-inch tablet that runs on an Intel Atom 1.6 GHz processor. In terms of performance it's the fastest, highest performing Kids tablet we have in this comparison, topping up pretty much every benchmark we threw at it. Even while using the tablet, whether it's creating a parent profile or kids profile, launching the custom Eddy launcher to access the Eddy zone, etc., the tablet felt fastest off the bunch, no doubt. Don't be ready to compare it to a regular



Apple's secret facility

Head over to the link below for a glimpse of Apple's secret Apple Watch fitness lab
<http://dgit.in/AppleSmartFac>



Now an Ola Cafe?

Ola, the popular Indian cab company recently launched a 20-minute food delivery service in four major cities <http://dgit.in/OlaCafe>

Kids Tablets

Android tablet, because frankly this isn't a regular Android tablet, even if it runs on Android 4.2 Jellybean. While in Eddy mode, the Kids zone is divided into various blocks, including (but not limited to) Creativity and fun, Maths, Our world, and more. Whenever your child isn't using the Eddy tablet, you or any other guardian can press the Android button and use it as a regular tablet, even download apps from the Google Play Store.

The tablet is cocooned in a rubber shell, which also has a small handle to let your kids hold the tablet properly. The build quality of Eddy is as spectacular as other tablets in this test, as it passed our 10 three-foot drops test without a crack or concern. We were really astounded by its build quality.

Some of the Kids-specific tweaks in the Intel Eddy are pretty good. Though Internet-enabled, the device does not allow any child to access regular tablet features without parental approval, and thereby shielding them from social media sites, the

Wild Wild Web and unwanted apps, in general. Coming pre-loaded with the Maxthon Kid Safe Web browser, Eddy provides a safe and secure environment for kids to browse the Web on. There's a certain degree of monitoring also built into the Eddy Tablet, which lets parents monitor their kids activities (basically, get an insight on how the tablet is being used by their kids) on the device through detailed reports. Also, to ensure Kids don't get addicted to the Eddy tablet itself, parents or guardians have the ability to set permissible limit of hours per day or week when their kids can use the tablet – they can even be as precise as allocating precise time slots, if you need that level of customization. If a child is getting overly hooked onto a particular app, you can ban its usage to promote other app activities to them. The level of parenting control provided by the Eddy is second to



Swipe Junior Tab

none, as far as tablets in this comparison are concerned.

Apart from being preloaded with over 150 apps, the Eddy also has a Kids Radar feature that lets you in on recommended new apps according to the user's age, area of interest and price range.

There's no doubt this is not the most inexpensive tablet from the bunch, but its price is justified when you look at all the features and customization it offers.

Swipe Junior Tab

From a looks and build quality perspective, the Swipe Junior Tab is probably the most contemporary tablet off the bunch with a slim, trim profile. It's easy to stow away the tablet anywhere, in your kids backpack or your purse – it's an absolute featherweight. However, don't be fooled by its anorexic profile because the Swipe Junior is made of the same reinforced

plastic that we've seen across all the tablets we tested in this comparison. The Swipe Junior also survived our 10 three-foot drops test with absolutely no crack or injury on its body. And internally, it doesn't seem to have sustained any damage because the device was on when we threw it, it remained on when it hit the wooden floor, and it continued to remain on and operate normally after the shock of landing on its posterior again and again. Now, if only more modern tablets could emulate what the Swipe Junior did and we'd be living in a happier world. But we digress.

The Junior Tab comes from California-based Swipe Telecom. The tablet has been especially designed for the kids giving parents the ability to keep an eye on what they really do with it. Like the Eddy tablet before, the Swipe Junior too comes with parental lock system and timer giving them the ability to monitor their kids' activities as well as giving them access to what they really require.

The tablet is powered by a 1GHz processor and packs in 512MB RAM. It boasts 4GB internal memory and supports up to 32GB memory card. With Android 4.1 (Jelly Bean) OS, the tablet allows the kids to experience a whole new user-experience. There's no kids zone-like skin here, only a regular tablet that's loaded with kids content. The Swipe Junior's lesser RAM bites it hard, because it affects its performance. It's not as snappy as the Eddy, which just makes it a pain to use sometimes.

The tablet allows parents to block everything except educa-





Dark Souls and Bongos?

An Xbox One gamer is attempting to play the brutally difficult Dark Souls using his Donkey Konga bongo drum controller. <http://dgit.in/BongoCont>



Importance of sound

According to research, sound plays a very important role in making online videos go viral. Here's why: <http://dgit.in/SoundImp>



Brand	Eddy Tablet	Swipe	Binatone	Mitashi	Mosti
Model	G70	Junior	AppStar	SkyKidz	Chhota Bheem
Price	₹7,999	₹5,000	₹9,999	₹6,999	₹8,499
Warranty	1 year	1 year	1 year	1 year	1 year
Features (of 20)	9.17	5.68	6.00	4.94	5.13
Performance (of 30)	26.16	15.26	14.71	16.83	15.79
Build and Design (of 30)	21.25	17.5	27.5	18.75	23
Overall (including Price Score)	56.58	38.44	48.20	40.52	43.92
Features					
Screen	7 inches	7 inches	7 inches	7 inches	7 inches
Pixel resolution	1024x600	1024x600	800x480	1024x600	800x480
CPU	1.2GHz, dual core	1GHz, single core	1.1GHz, single core	1GHz, dual core	1GHz, single core
RAM	1GB	512MB	512MB	1GB	1GB
Storage	16	4	4	8	8
OS	Android Jelly Bean	Android Jelly Bean	Android Jelly Bean	Android Jelly Bean	Android Jelly Bean
Stylus	No	No	Yes	No	No
Battery	2800 mAh	3000 mAh	2800 mAh	3300 mAh	3700 mAh
Rear Camera	2 MP	0.3 MP	0.3 MP	0.3 MP	NA
Front Camera	2 MP	2 MP	2 MP	2 MP	2 MP
Expansion slot	microSD	microSD	microSD	microSD	SD
3G Connectivity	Yes, via dongle	Yes, via dongle	No	No	No
USB port	microUSB	microUSB	microUSB	microUSB	miniUSB
Weight	300 gm	290 gm	440 gm	290 gm	440 gm
Parent mode	Yes	Yes	Yes	Yes	Yes
Headphone/Mic (1/1)	Yes	Yes	Yes	Yes	Yes
Performance					
AnTuTu	17922	7997	6834	10973	9089
Quadrant	4564	1876	1900	2368	1951
3D Mark Ice Storm	5196	1478	1427	1461	977
AnTuTu Battery Test	4009	3457	3058	3879	4405
Peacekeeper	585	328	299	287	187
Octane	1656	1093	895	890	468
Acid3	3	2.5	3	2.5	2.5
Screen brightness	7.5	5.9	6.3	5.8	6.5
Audio performance	6	5	7	5	7
Build & Design					
Shell quality	10	6	10	6	10
Extra padding	Yes	Nope	Yes	Nope	Yes
Big buttons	No	No	Yes	No	Yes
Volume rocker	Yes	Yes	Yes	Yes	Yes
Survive 10 drops	Yes	Yes	Yes	Yes	Yes
Game controller mode	No	No	Yes	No	No
Kids software	8	6	8	6	9



International Day of Happiness

It was celebrated jointly by Google, the UN Foundation and Pharrel William's with a website: "Global Happy Party" <http://dgit.in/YesHappy>



They got it right!

Head over to the link below to take a look at five things that Android got very right with Android 5.1 Lollipop <http://dgit.in/DroiDroi>

Kids Tablets



Binatone AppStar

tional apps to make their kids learn through it. Another unique feature of the device is Usage Track Report which gives charts and information about the usage pattern on a minute-to-minute basis. Made with Food-Grade quality materials, the tablet is safe for all kids. And like we said earlier, it's built well, too.

Binatone AppStar

If there was one tablet off all the ones we have tested for this comparison test which was meant for gaming, it would have to be the Binatone AppStar GX. The tablet is the largest tablet off the pack, and comes with a kick-stand cover which lets you keep the tablet on a desktop while in landscape mode – very thoughtful, because no one likes to hold on to tablets all the time, not even adults, and more so kids. Good thought put into its design, we must say. And like the other tablets, this one survives the drop test too – all 10 times that too, which is slightly bewildering because being the largest tablet off the bunch, we thought it would be the most susceptible to damage. But apparently not. Which means it's built well, if anything.

What's more, a unique design highlight of this tablet

is that it loosely resembles the design of a classic games controller – it has a D pad on the left, action buttons on the right. Therefore, gaming on it is much more intuitive, if you were growing tired of its touch controls. Nothing beats opposable thumbs, as most gamers would agree, and it's nice to see this tablet really focus hard on that gaming niche. The extra hardware buttons truly turns this tablet into a controller with a big screen that seems perfect for gaming.

Apart from gaming it also helps the children with studying and learning by coming preloaded with a ton of apps that are educational in nature and promote interactive learning.

The custom UI also had a lot of features that give you control over the content that your kids can access. The UI hits a deadlock where your password cannot be recovered if you forget the password hint, though – something we found out at the very last stages of our time with this tablet.

While it comes geared for gaming usage, its performance is average compared to the other tablets. It comes with 1.1 GHz ARM Cortex A9 processor, but there is only 512 MB of RAM in there and less than 3000 mAh battery, which is a bit of a dampener. Also, its screen resolution is disappointing at 800×480 pixels (similar to the MOSTI Chhota Bheem), where every other tablet offers 1024 × 640 pixels.

Mitashi Sky Kidz SkyTab 2

The Mitashi Sky Tab 2 runs on Android 4.2 Jelly Bean out-of-the-box and features a 7-inch display with a 1024×600 pixel resolution and runs on a 1GHz dual-core chip coupled with 1GB of RAM. In terms of build quality and design, there are remarkable similarities between the Mitashi and Swipe tablets. Both the tablets look strikingly similar except the tiny home

button at the front. Even the custom UI in both the tablets is the same. The only difference is in the hardware, which fails to give a smooth performance, compared to the likes of Intel Eddy. The Mitashi Sky Kidz SkyTab 2's design would be comfortable for kids since the tablet isn't very big and quite easy to hold even in one hand as it's surprisingly lightweight. But its touchscreen performance isn't quite up to par. The Mitashi Sky Tab 2 comes with 27 preloaded kid-friendly applications, apart from a parental control feature. Content filtering, monitoring and blocking of apps is possible on this tablet.

WINNERS

Based on the scope of our test and comparison shootout, it is with little doubt that we ascertained that the Intel Eddy tablet was the best performing tablet off the bunch. It therefore won our Best Performer Award without any trouble. When it comes to the Best Buy Award, Swipe's Junior tablet bagged that award with relative ease, as it was the most inexpensive tablet off the bunch, allowing budget conscious parents a great value proposition and entry point into the world of kids tablets. Choosing the Editor's Pick Award candidate was between two devices, in all honesty – the Binatone AppStar and MOSTI Chhota Bheem. But because the Binatone didn't back up its design claim of a gaming tablet with the requisite hardware decisions, it lost out to MOSTI Chhota Bheem which won our Editor's Pick Award for cleverly incorporating the addictive cartoon character to help engage kids into the tablet's features and also its KID'OZ software bundle is extremely useful for kids. **1**



Mitashi SkyKidz Tablet

Bazaar

THE LATEST PRODUCTS REVIEWED FOR YOU

The Digit Test Centre receives hundreds of products every month. Each of these products is put through a series of tests and is finally given a score. The final score is arrived at after considering a number of factors and evaluating them in terms of features, performance, value for money, build quality, and, in the case of software, even ease of use.

For better understanding of our ratings, here's a quick guide to our overall score

-  **Extremely poor product.**
Keep away!
-  **Strictly OK.**
Not recommended
-  **Decent product.**
Go for it, but there may be better products out there.
-  **Very good product.**
Highly recommended.
-  **Ground-breaking product.**
We've never seen anything like it before.
A definite must buy!

Page 92 ▶
Micromax
Canvas Hue



◀ Page 93
Logitech UE Boom



Page 95 ▶
Inno3D iChill
GeForce GTX
960 Ultra



◀ Page 96
Bowers &
Wilkins P3



▶ Page 97
Logitech X300



▶ Page 98
Moto E (2nd
Gen) 3G



& MORE...

**INTERACTIVE
REVIEWS INSIDE!**
KEEP AN EYE OUT FOR
THE BLIPPAR ICON



DOWNLOAD
BLIPPAR APP ▶ FILL SCREEN
WITH IMAGE ▶ BLIPP IMAGE
INTO LIFE!



Canon PowerShot SX520HS

Zoom into loads of fun

The PowerShot SX520HS is an upgraded model of the SX510 HS with a much higher zoom capability and a larger body.

A bridge camera, the PowerShot SX520 HS has a better 15.9MP CMOS sensor which is a bump from the previous gen and it also has a larger 42x optical zoom lens which offers focal length of 24-1008mm. There is a further 84x digital zoom as well which is, to be honest, overkill and an unnecessary addition. The aperture range is f/3.4 to f/8 on the widest focal length and f/6 to f/8 on the highest focal length. For low light performance, the camera offers an ISO range of 100 to 3200 which is pretty good for low light shots.

The SX520 HS feels a lot like its predecessor but is now a bit larger and a bit heavier. It is still however compact enough to carry around on your vacation if you don't like carrying a bulky DSLR. The camera is all plastic with a matte that offers some grip. The lens however feels stronger as it has a metal ring around it to offer protection. At the back there is a 3-inch display which is the same as the previous gen camera. The back also a bunch of control buttons including a dedicated recording button, an exposure compensation/delete button, a playback button, the menu button and the drive control button. There is also a 5-key D-pad, but Canon has removed the rotating wheel which was present on the last model. Comparing the new SX520 to the SX510, the former feels larger but somehow seems to offer a lesser functionality. However the overall build and quality is quite appealing.

One big feature that we miss is Wi-Fi as Canon has surprisingly removed this feature from the upgrade. Another feature that has been omitted is the slow-mo video mode so now you only get 1080p videos at 30fps.

Performance

The camera has definitely improved on the auto-focusing system and although it isn't the fastest, it is still pretty good in its price-range. You also get a manual focus option which isn't the fastest solution but it's always nice to have. The auto exposure is somehow not very impressive as it tends to overexpose the pictures and we suggest you use any of the manual modes instead. The colours are quite accurate and even noise reduction has been



Price
₹17,995



implemented well. The auto white balance is also quite accurate and the different presets can be useful at times.

The best feature however is the large focal length coverage. With a 42x zoom range, you can shoot far off subjects with ease. In broad daylight, the pictures on the maximum focal length come out looking pretty good. Canon has improved on the auto-focus on the highest focal length which was an issue on the last model.

Video performance is pretty good and the video quality is impressive. Noise is under control but there aren't a lot of controls to tweak the video. The various video resolutions include 480p @30fps, 720p @30fps and 1080p @30fps.

Verdict

If you want a super zoom camera at a budget, then the SX520 HS is a great recommendation. While Canon has upgraded the zoom capability, auto-focus and noise reduction, it has omitted some really useful features like Wi-Fi and the rotating d-pad wheel.

With that said, the camera is actually quite a good investment for everyday shooting. An alternative option could be the Nikon Coolpix P530.

Kunal Khullar



Features.....	60
Performance.....	80
Value	70
Design	70

Specifications

Zoom: 42x optical;
Lens: 24mm wide-angle;
Megapixel: 16; **Sensor:** 1/2.3-inch CMOS; **Max Aperture:** f/3.4 (W), f/6.0 (T); **Sensitivity:** Auto, ISO 100-3200; **LCD Panel:** 3-inch TFT, 461,000 dots;
Video: Up to Full HD @ 30fps; **Weight:** 440g;
Warranty: 2 years

Contact

Canon India Pvt Ltd
Phone: 1-800-180-3366
Email: <http://dgit.in/19plzCn>
Website: <http://www.canon.co.in>



Suction cup power bank

With a suction cup at the back, Esstot has launched a portable power bank that has a capacity of 2600mAh



Redesigned MacBook

Apple revamped MacBook design with 12-inch display, slimmer profile, three color options and a single connectivity port. More in our WorldView section.

Dell Inspiron 20 3043

An innovative desktop-tablet hybrid



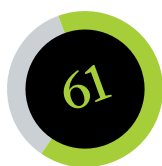
Price
₹27,990

This is no normal all-in-one desktop computer from Dell. Equipped with a 19-inch multitouch screen and a built-in battery, and a photo frame shell, this AIO can very well transform itself as a giant tablet – a feat worthy of a second look. Its build quality is quite good,

and its kickstand (supported by a strong spring) is made of metal and feels much sturdier than most plastic ones we've seen on competing AIOs. It allows the screen to tilt back to a large degree, and the stand can also hide within the back panel to essentially the AIO into a 20-inch touch-enabled Windows tablet. The screen's glossy surface attracts fingerprints, however it performs well when it comes to touch input. But on all other parameters (brightness, contrast, etc), its performance is average.

The keyboard is very nice to type on, however the mouse design could've been better. There isn't any perceptible lag on both input devices as they connect wirelessly. Audio is loud on the Inspiron 20, but it's not great. Being a Pentium dual-core paired with a slow hard drive, it's no surprise this Dell AIO doesn't offer anything but basic performance. It's battery life of 3 hours 55 minutes is the only bright spot in an otherwise drab performer. Great start as a concept coming to life, this machine, with scope for improvement.

Jayesh Shinde



Features	52
Performance.....	66
Design	50
Value	76

Specifications

Screen: 19.5-inch, multitouch, 1600x900 resolution; **CPU:** Intel Pentium N3530 2.16 GHz; **RAM:** 4GB; **HDD:** 500GB, 5400rpm; **GPU:** Intel HD Graphics; **Webcam:** 720p; **Connectivity:** 3 x USB 2.0, 1 x HDMI, 1 x SD Card slot, 1 x Ethernet, 1 x microphone + audio jack; **Wireless:** Wi-Fi 802.11n + Bluetooth 4.0; **Stand:** Yes; **Accessories:** Wireless keyboard, mouse

Contact

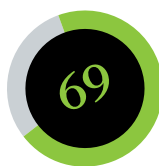
Dell India Pvt Ltd
Phone: 1800-425-4026
Email: NA
Website: www.dell.co.in

Micromax Canvas Hue

Not your everyday Micromax phone

When I saw the Micromax Canvas Hue for the first time, it felt like *deja vu*. The phone looks like a Huawei Honor 6 lookalike with a removable back panel. Micromax has done a commendable job as the design looks good and phone feels quite sturdy.

The Canvas Hue trumps the competition with a 5-inch HD AMOLED screen. It offers good viewing angles, vibrant colour reproduction and decent outdoor legibility. The usual stock like UI has been sidelined for a custom UI which works and feels like, something you would see on a smartphone from a Chinese OEM like Xiaomi's MIUI.



Features	73
Performance.....	57
Design	75
Value	70

Specifications

Display: 5 inch AMOLED display with 1280x720 resolution (294ppi); **Battery:** 3000mAh; **Storage:** 8GB, expandable via microSD card; **Camera:** 8MP rear with LED flash, 2MP front; **SoC:** Mediatek MT6582; **CPU:** 1.3GHz quad-core; **RAM:** 1GB; **Operating system:** Android 4.4.2; **Connectivity:** 3G, W-Fi, Bluetooth

Contact

Micromax
Phone: 18605008286
Email: info@micromaxinfo.com
Website: www.micromaxinfo.com/



Price
₹9,500

Performance of the Micromax Canvas Hue is decent. Opening multiple apps, playing FHD content or playing processor intensive games were dealt with ease and without any major hiccups. I would also add that the whole experience is not completely lag free but it gets the job done.

The Canvas Hue uses an 8MP primary camera which takes good pictures and is able to achieve a slightly better picture quality over the Asus ZenFone 5. The 3000mAh non-removable battery was able to give out almost 12 hours of battery life making it one of the best in the range.

So, if you are not into benchmark scores and would rather prefer a phone that looks good and can easily last you a day, go for the Canvas Hue from Micromax.

Hardik Singh



Nokia launches Lumia 430

Nokia launched ultra affordable Lumia 430 with 4-inch display, dual-core Snapdragon 200 CPU, 1GB RAM for \$70. Launching in April.



Pirates get Windows 10

Microsoft promises that it will offer free Windows 10 upgrade to its pirated users as well. We wonder why?

Bazaar

Logitech UE Boom Bluetooth speaker

Sonic Boom

It's a rare thing nowadays to come across a mainstream tech product that's not available in India, especially if that product actually excels at whatever it's meant to do. This is the case with the Logitech UE Boom Bluetooth speakers, which, for some reason, is absent from Logitech's product pipeline for India. That's quite disappointing since the UE Boom is one of the best Bluetooth speakers that I've come across.

As is the case with all good tech products, the UE Boom combines good design with impressive performance. The UE Boom is perfectly cylindrical in shape except for an almost flat rubber strip that runs down its spine. This strip holds the volume keys, designed to look like a large plus and minus sign, with orange accents on the inside. The rubber strip extends to both the top and the base of the speaker and completely covers both ends. One end has the power and the Bluetooth pairing buttons while the other has the microUSB and the 3.5 mm ports along with a small metal loop to hang the speaker. The UE Boom also comes with a rubber cover to seal off the ports and protect them from water. The body of the UE Boom is covered with a fabric mesh that hides the driver and the speaker grill.

For its size, the UE Boom feels a little heavy and weighs 538 grams but it's still a good looking and very well-built device.

Logitech has also released an Android and iOS app that you can use to control the UE Boom. The app lets you choose between a few EQ presets, set an alarm to wake you up and help setup a second UE Boom to use in conjunction.

The UE Boom is loud and one that produces good volume with no distortion. Bass heads will especially like the way the Boom outputs deep bass despite its petite size. On the other hand, I was slightly disappointed by the way the Boom handles highs. Cymbals and snares in songs sound subdued and you have to push the volume up to enjoy most rock songs. Mids are better than I expected and the Boom does well with vocals, helping them stand out from the mix and not get drowned amidst all the other instruments.

I would wholeheartedly recommend the Logitech UE Boom to you if your playlist is filled with electronic or club music. In fact, even if you have a lot of rock or pop songs in there, I think



Price
₹12,000
(approx.)

you will be pleasantly surprised by the UE Boom. Another thing that may surprise you is the battery life because Logitech claims that the Boom lasts for 15 hours of playback but I was able to eke out over 21 hours. The Boom also has excellent range and it worked up to 80 metres away from the phone with an unhindered line of sight.

Now that I'm done with the recommendations, let me address the elephant in the room. Logitech, in its infinite wisdom, has deemed it fit to not launch the UE Boom in India and it's not practical to spend a lot on getting it shipped here. However, it is also one of the best portable Bluetooth speakers that I've come across so, if you've got money to burn, then go ahead and order it.

Nikhil Pradhan



Performance..... 75
Features..... 75
Build 75
Value for Money 75

Specifications

SPL: 88 dBA; **Frequency Range:** 90 Hz - 20 kHz; **Drivers:** Two 1.5-inch, 4 Ohm Drivers; Two 2-inch Passive Radiators; **Diameter:** 6.5 cm; **Height:** 18 cm; **Weight:** 538 g; **Ingress Protection Rating - Liquid - Level 4:** Water Resistant Acoustic Skin

Contact

Logitech India
Phone: 022-33416111
Website: www.logitech.com



Chromecast with TV remote

Google Chromecast's new update lets you control it (play, pause) with your existing TV remote. <http://dgit.in/ChrCastC>



Blackberry SecuTablet

Blackberry teams up with IBM to launch a secure version of Samsung Galaxy Tab S 10.5 <http://dgit.in/BBSecTab>

Tata Photon Max Wi-Fi Duo

Convenient portable hotspot for on-the-go Internet

Tata's new Photon Max Wi-Fi Duo incorporates a wireless router, modem, and power bank all into one palm-sized device. But that's not all this paperweight-sized device can do.

Once activated through a PC, we had no trouble connecting five devices (or clients) to its password-protected Wi-Fi network. It even has a NAS-like feature, allowing you to share up to 32 GB of data (through a microSD card slot) to all clients connected to the network. We tried testing clients up to a range of 10-12 metres and the reception was great in line-of-sight. Its 4400



Price
₹2,899

mAh built-in battery lasts anywhere from six to sixteen hours, depending on the number of clients connected and amount of data being downloaded. The device can also charge smartphones through a microUSB port. This device only supports a postpaid plan for now.

Currently only sold in Mumbai and Delhi circles, the device failed to hit its advertised 3G speed of over 9 Mbps across several of our test zones in Mumbai. Double digit latency was rare, and the maximum speed we ever hit was 3.7 Mbps, and while travelling through the length of Western Express Highway in Mumbai, the device failed to touch even 2 Mbps. Speeds fluctuated between 400 kbps - 2 Mbps with quite a few dead zones. Of course, if you are an existing Tata Photon customer with great signal reception, this device should work well. But more work needs to be done. And no, this is not for online gaming – the performance just isn't good enough.

Jayesh Shinde



Features	70
Performance.....	40
Value	60
Design.....	70

Specifications

Dimension: 76.4 mm x 67.2 mm x 23.0 mm; **Frequency:** 800MHz; **Antenna:** Internal; **Battery:** 4400 mAh; **External storage:** up to 32GB, microSD; **Roaming:** Free, across India; **Wi-Fi:** 802.11b/g/n; **Clients support:** Up to five max

Contact

Tata Teleservices Ltd
Phone: 1860 266 1515
Email: 1515@tatatel.co.in
Website: <http://dgit.in/IDqESc7>

Corsair Carbide 100R Silent Edition

Features and Performance - Check! Silence - Check! Price - Nevermind!

Coming from the lower rung of Corsair's PC cabinet portfolio, the Carbide 100R Silent edition case is aimed at users looking to house their low to mid end ATX builds and save space in the process. The case maintains a simple all-black look throughout its design and you won't find anything fancy with it. As for extras, Corsair has thrown in a three speed fan controller with its switch at the back of the case. There are sound dampening foam sheets stuck on both the side panels and the



Price
₹4,499

top part. Installation inside the 100R Silent was easy but we must say that although the case has enough cable routing holes, working inside it can be quite restrictive at times because of its size. There are two versions of the 100R – one standard and the other silent and so, the standard version (available for ₹3,999) features the addition of a side-panel window and top fan mounts while the Silent one doesn't. This somewhat limits the cooling options with the silent version but it pays off when you talk about its excellent noise performance.

Cooling performance was at par with other contenders in this price range as it maintained a temperature of 35°C at full load. The 100R Silent does exactly what it advertises but if you aren't bothered much about fan noise, then there are much cheaper alternatives like the Thermaltake Versa H21.

Siddhant Sharma



Features	72
Performance.....	68
Build Quality	69
Value for money.....	66

Specifications

Dimension: 471(H) x 200(W) x 430(L) mm; **Motherboard Support:** ATX, micro ATX, mini-ITX; **Expansion Slots:** 7; **Form Factor:** Mid-tower; **Drive Bays:** Toolless (x2) 5.25", (x4) Combo 3.5"/2.5"; **Cooling:** Rear 1x120mm, **Front:** 2x120/140mm; **Front I/O:** (x2) USB 3.0, Audio jacks; **Weight:** 4.8kg; **Warranty:** 2 Years

Contact

Corsair Memory
Phone: 9845651608
Email: indiaservice@corsair.com
Website: www.corsair.com

Inno3D iChill GeForce GTX 960 Ultra

Freakishly cool but for a price

Inno3D cards weren't available in the Indian market until recently. They are an NVIDIA exclusive brand and they have a good presence all over the world. They might not be easily available online but it wouldn't stay that way for long. Inno3d does have two brands and the iChill GTX 960 featured here has a much higher overclock and a really good cooler.

Build

The card is beefy. Plenty of manufacturers have made it a point to not take up more than two PCIe slots for high end graphics cards but Inno3d has made an exception in this regards. Since the 960 only supports two-way SLI this isn't a bad thing. For a 970 or a 980 this is problematic since it will impede the implementation of 3-way and 4-way SLI. The iChill GTX 960 takes up three PCIe slots and has three cooling fans to achieve a peak load temperature of 40 degrees Celsius in our test environment. This was a great surprise since the Gigabyte G1 Gaming SKU which also had a triple-fan cooler went all the way to 63°C.

The rear of the card is protected by a back-plate that covers the entire surface and has ventilation holes all through to the end. The front of the card has metal clip-ons which are further secured by bolts. The entire assembly is easy to remove but given the cooling performance of this card, going for an aftermarket cooler is a futile venture unless you want to incorporate liquid cooling. Moreover, with cooling that is this good you'd expect a lot more noise from the fans than usual but that was definitely not the case here, these fans even at peak load were quite silent. Power viruses might push it over the limit and cause coil whine but we don't run those.

Performance

This is the highest clocked GTX 960 that we've had. With a base clock of 1329 MHz and a boost clock of 1393 MHz this card did get ahead when it came to synthetic benchmarks but as is with all Maxwell cards we've seen, this overclock doesn't translate to a noticeable difference in FPS so you're paying for everything else that the card provides. Despite having a significant lead over the Gigabyte GTX 960 G1 Gaming SKU it scored a little lesser. 3DMark's FireStrike gave the Gigabyte card 6895



Price
₹32,760

and the Inno3d card 6869. So the difference is so miniscule that it was well within our margin of error, so we peg both cards to be at the same level.

Value

The card sells at an MRP of ₹32,760 which is way too much for a GTX 960. We looked online for these cards and though we couldn't find the iChill GTX 960 we did find the iChill GTX 970 which was priced for ₹32,303. So when this SKU does show up on online stores you can expect it to be priced within reason. The packaging includes a iChill metal badge/sticker, a 3DMark license code for the advanced edition (₹1,500) and a decent mouse pad. We estimate the street price to be around ₹24K which is still expensive considering that the cheapest variant sells for ₹17K. So the card does fall behind the competition in providing value for your money. However, we'd like to point out that no other card comes even close to getting a 35 degree temperature difference at peak load level. The cooler design actually makes a massive difference. We didn't even remove the metal accents and the plastic components that sit on the cooler so despite these things coming in the way of the air flow, the cooler still managed to climb all the way to the top pedestal.

Overall

The Inno3d iChill GeForce GTX 960 Ultra comes with a really effective HerculeZ X3 Air cooler and is the highest clocked GTX 960 that we've had the pleasure of testing. The card is quite long (300mm) which means that certain cabinets might not be able to accommodate the card. There are plenty of freebies with the card but the only aspect that seems to pull back the overall score for this card is the price.

Mithun Mohandas

64

Performance..... 47
Value 75
Build 70

Specifications

Chipset: GM206; **Base clock:** 1329 MHz; **Memory clock:** 1800 MHz; **Stream processors:** 2048; **Texture Units:** 128; **ROPs:** 64; **Manufacturing process:** 28 nm; PCIe 3.0, 4096 x 2160 digital resolution support, 2 GB Memory; **DirectX support:** 12; **OpenGL support:** 4.4; **Power Connectors:** 6Pin + 6Pin; TDP - 120W; **Warranty:** 3 years.

Contact

Abacus Peripherals Pvt. Ltd.
Phone: 1800 22 1988
Email: enquiry@abacusperipherals.com
Website: www.abacusperipherals.com



Vaio launching a smartphone

Vaio launched its first Android smartphone having Snapdragon 410 SoC, 5-inch display and 2GB RAM in Japan on March 20. <http://dgit.in/VaioPh>



World's smallest drill

An engineer from New Zealand 3D prints the world's smallest drill powered by hearing aid battery. <http://dgit.in/SmallestDrillEver>

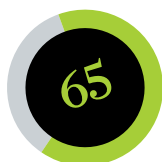
ASUS STRIX GTX 960

Strix one, strix two, strix three! You're in!



Price
₹19,500

ASUS' GTX 960 comes in two flavours with the STRIX branded one that is featured here being their overclocked card with a twin-fan cooler. The other variant is a lot more compact with a single fan for smaller builds. Going by physical dimensions, the STRIX edition seems to be closer to the ZOTAC AMP!



Performance.....47
Value87
Build60

Specifications

Chipset: GM206; **Base clock:** 1291 MHz; **Memory clock:** 1753 MHz; **Stream processors:** 2048; **Texture Units:** 128; **ROPs:** 64; **Manufacturing process:** 28 nm, PCIe 3.0, 4096 x 2160 digital resolution support, 2 GB Memory; **DirectX support:** 12; **OpenGL support:** 4.4; **Power Connectors:** 6Pin; **TDP:** 120 W; **Warranty:** 3 years

Contact

ASUS Technology Pvt. Ltd.
Phone: 1800 20 90365
Email: reachus@asus.com
Website: www.asus.in

Edition than other SKUs that we've tested. And it's ahead in terms of performance by a sliver and the peak load temperature topped out at 60 degrees Celsius which is what we've observed with most coolers on the GTX 960. This too, like the rest, has a cooling solution that shuts down at low temperatures.

The core clock is slightly greater than the ZOTAC GTX 960 but since we didn't see it translate into a vast difference in performance the decision to pick one over the other comes down to the build quality. So you can purchase the ASUS SKU for a little extra money but the operating temperature is much lower which translates to a longer life or if you are going to be upgrading every year then the life of the product is less of a concern. Rather getting good performance for less money seems to be the favourable approach. However, all of this is based on the MRP, the street price might be real close to the competitors. In that case, we'd prefer the ASUS SKU over other similarly sized SKUs.

Mithun Mobandas

Bowers & Wilkins P3

Jony Ive would be proud

The B&W P3 is certainly not a new device, at least worldwide. It's been in existence for at least three years, since the time British speaker manufacturers B&W made their foray into the headphones space. However, since B&W very recently made its official entry into the Indian market we'll be seeing a lot more of these around. A perfect time then to give you our take on whether you should go for these headphones.

Although the P3 is available in a variety of colours, we got the white variant, which is perhaps is the best looking one of the lot. The grey fabric mesh covering the heat-sensitive foam pads, the brushed metal housing, the chrome accents; all of it speaks a very familiar design language. Truly, you'd be forgiven if you thought this was an Apple product. Even

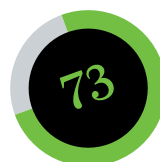


Price
₹16,500

the most hard-nosed connoisseur would have to admit they look good, but how do they sound alright? Yes.

They're not exactly superlative in detail or produce reference grade tonal accuracy but they are what I've often come to describe as easy on the ears, much like the Harman Kardon CL. In fact, the performance is very similar to the CL, though the P3 gives a slightly more wider soundstage. The bass is punchy and not at all lacking body or thump.

But besides the looks and performance, the P3 has a few nifty things to offer. Take for instance the easily detachable (and therefore replaceable) cables. The same goes for the super-cool memory foam pads that snap into place with strong magnets. The ivory finish clamshell hard case might seem bulky but it's just what you need to protect these seemingly delicate headphones. An average Joe may not be able to afford them. But then again they're probably not meant for the average Joe.



Features.....78
Performance.....77
Build75
Value60

Specifications

Driver size: 30 mm; **Impedance:** 34 ohms; **Frequency range:** 10 Hz to 20 kHz; **Weight:** 130 g; **Dimensions:** 165x150x48 mm

Contact

Neoteric Infomatique
Phone: 1800-102-6621
Website: www.neoteric.co.in
Email: support.cts@neoteric.co.in

Siddharth Parwatay



Offline Vine?

Vine's latest update for iOS pre-loads videos before you open the app, making it available for offline viewing as well. <http://dgit.in/VinePre>



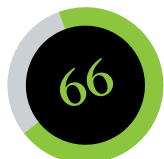
PlayStation Vue

Sony launches cloud-based broadcast TV service for PS4 and PS3 called PlayStation Vue. <http://dgit.in/PS34Vue>

Bazaar

Logitech X300 Bluetooth speaker

Let's get loud!



Features 79
Design & Build 79
Value for money 58

Specifications

Height: 2.7-inches;
Width: 5.9-inches; **Depth:** 2.8-inches; **Weight:** 335 g;
30-foot wireless range

Contact

Logitech India
Phone: 022-33416111
Website: www.logitech.com

The Logitech X300 is not flashy but it's a good looking speaker nonetheless. It's about the size of a packet of biscuits and not really heavy. The X300 has a rubberized plastic body with a matte finish while the speaker grill is entirely made of plastic. Overall, it is a well-built, good leaking speaker, something that can find a spot on both your office desk.

It's quite surprising how loud the X300 is for its size. It can easily fill an average sized room without any distortion or drop in clarity.

The X300 is good, but not great, when it comes to bass-heavy music. The overall sound signature is very warm, and suits Hip-Hop and Electronic music. While the performance was not as good when it came to the acoustic and rock tracks, I was pleasantly surprised to hear the crispness of the



Price
₹5,995

cymbals and the snare drum reproduced decently. Unfortunately, it royally messed up when it came to the metal test track, with the audio sounding very confined.

The X300 has decent battery life that easily vaults over the company's quoted time.

Logitech claims that it should last five hours of continuous play-

back but I managed to squeeze out ten.

The X300 costs a fair sum of money (₹5,995) if you buy it from physical retail stores. On the other hand, it costs ₹4,500 on Flipkart. However, Logitech makes it very clear on the packaging box that users who buy it online may not get warranty. If price was not a concern, then go for it. Otherwise, look at either the Logitech Mini Ultimate Ears Boombox or the JBL Flip II.

Nikhil Pradhan

Acer Aspire E15 571-5673

A good basic laptop. Nothing more, nothing less.



The brand new Aspire E15-571 is a mainstream laptop from the Taiwanese manufacturer that doesn't try to do anything extraordinary, but tries to hit the sweet spot across various aspects. It has a boring dark gray look, and its screen isn't the most glossiest nor is it absolutely matte either. Beyond plain looks, the laptop is built well, with no perceptible flex or unconvincing joints, which is great to see.

The laptop comes with a 720p webcam which works very well for video calling, and an M-DISC compatible DVD writer which claims to burn really long lasting data on supported M-DISC media – a claim that will take years to test. The laptop has a nice chiclet-styled keyboard which is a pleasure to type on, and the dedicated number pad is definitely an

added bonus. But its single-slab touchpad takes time getting used to – there are no separate mouse buttons to click assuredly either, which is a pity. The onboard audio isn't very loud, only useful for personal entertainment, but clear and largely distortion-free at medium to high volume levels.

Multitasking and most widely used daily apps work just fine on the Aspire E15's hardware, which is pretty good – we especially like the 8 GB of RAM which keeps the thing snappy. And the battery life offered is just under 6 hours in our synthetic tests, which is great by laptop standards. If only this laptop was priced around the 40k mark, it would've been a truly great deal.

Jayesh Shinde



Price
₹44,999

Feature 61
Performance 79
Design 53
Value 76

Specifications

Screen: 15.6-inch, 1366x768 pixel resolution; **CPU:** Intel Core i5-5200U 2.2 GHz; **RAM:** 8 GB DDR3; **HDD:** 1 TB; **GPU:** Intel HD 5500 Graphics; **OS:** Windows 8.1; **Weight:** 2.5 kg; **Connectivity:** 2 x USB 2.0, 1 x USB 3.0, 1 x HDMI, 1 x VGA, 1 x Ethernet; **Wireless:** Wi-Fi 802.11ac, Bluetooth 4.0; **Webcam:** HD 720p

Contact

Acer India Pvt Ltd
Phone: 1800 11 6677
Email: ail.nbeasycare@acer.com
Website: www.acer.co.in



Make your kid build his own toy

Autodesk launches an app 'Tinkerplay' to let kids build their own toys and 3D print them with minimal assistance. <http://dgit.in/1MQIdCX>



Boost camera performance

Researchers find that controlled sound waves in cameras can increase sensor's performance in low-light conditions. <http://dgit.in/TinQuak>

Moto E (2nd Gen) 3G

Not the king of budget anymore

With the new version of the Moto E now official, Motorola has now officially refreshed its entire range of smartphones. The new Moto E though comes with some confusing choices. For one, why would Motorola go with 3G and 4G SKUs for the device? Also, what sense does it make to put the Snapdragon 200 SoC in the 3G version when almost every other manufacturer with a phone in this price segment is going with the newer Snapdragon 410? Why give a 64-bit OS but not a 64-bit processor?

Well, the company simply says that the choice of processors won't affect the performance and that Motorola couldn't have provided the ₹6,999 price tag if they used the Snapdragon 410. Xiaomi and Lenovo are both offering the 410 while Micromax's Yu is selling the Snapdragon 615 at ₹8,999. We understand that Motorola's QA specifications might not allow cutting any corners elsewhere which is why they've gone with the said price. Anyway, all this affects the Moto E dearly since the Indian market happens to be a very price conscious one.

Turning on the device, you won't be disappointed with the overall UI experience. Android Lollipop is very lightly skinned by Motorola and runs with little to no lags on the device. The lags will pop up the minute you turn on a game like Marvel: Contest of Champions. Given that this isn't a phone to play high end games in, the performance difference becomes very apparent. The performance of the Moto E is better than the Lumia 532 and 435, but nowhere close to what the Redmi 2 and Lenovo A6000 can provide.

Next, Motorola 'heard' its users, who complained about the lack of a front camera. As a result, the company put in a VGA camera. Yes, you read that right, a VGA camera in this day and age. While this camera will make your selfies look bad, the rear 5MP camera is no great shakes either. Images from the Moto E are lack lustre and lack details. The camera completely falls

behind the competition under low light conditions as well.

The overall design language has been kept the same, but the new Moto E is a slightly bigger device than its predecessor. That said, it is sufficiently light and the new rubberised grips around the side of the smartphone add to the ergonomics. It's easy to hold and easier to use. In fact, some might even say that the new Moto E is a good looking device for its price.

Speaking of the bigger size, the new Moto E comes with a 4.5 inch display, up from 4.3 inch in its predecessor. While this is just about acceptable for the budget range today, the 540x960p resolution surely isn't. The new Moto E has good viewing angles, but that's about all that you can say about it. The colour reproduction is not quite as good as we would have liked it to be and the display lacks the sharpness that competing models provide.

The ₹6,999 price tag seems too much for the new Moto E. While the smartphone is good for a first time mobile user, it doesn't make sense for everyone. The older version used to provide very good value with the same price tag, but the new one just pales against the competition. Both the Lenovo A6000 and Xiaomi Redmi 2 are superior smartphones, which provide better value than the Moto E (2nd Gen).

What's even more unfortunate is that the 3G and 4G separation will drive up the cost of the 4G version. That one comes with the newer generation processor and can actually take on the Redmi 2 and Lenovo A6000. Instead, it will lose value thanks to the higher pricing. As things stand, it seems Motorola is depending solely on its brand value and customer service to gain the consumer's interest. The new Moto E is no longer the king of the budget segment and doesn't provide the best value for the price. The only thing it really has over its competitors is Android Lollipop out of the box.



Price
₹6,999

67

Features	75
Design	70
Performance	67
Multimedia	46
Value	71

Specifications

Display: 4.5-inch 540x960 pixel; **Processor:** 1.2 Ghz Qualcomm Snapdragon 200 quad-core; **Camera:** 5 MP rear, VGA front; **Storage:** 8 GB, expandable to 32 GB; **RAM:** 1 GB; **Operating System:** Android 5.0 Lollipop; **Battery:** 2390 mAh

Contact

Motorola Mobility LLC
Phone: 1-800-102-2344
Email: dgit.in/1w46rmo
Website: www.motorola.in

Prasid Banerjee



Google Store

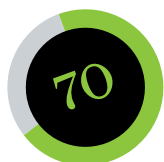
Google announces an official store that will replace Play Store for all the hardware listings <http://dgit.in/1DGbeQn>



USB Killer

This USB drive can fry your laptop by sending a -110V power into the USB interface via a transistor. <http://dgit.in/1xnxQDc>

Bazaar



HP Stream 8

The best budget Windows tablet out there

Features 65
Performance..... 65
Value 80
Design 70

Specifications

Display: 8 inches IPS, 1280x800 resolution (188 ppi); **Battery:** 4000 mAh; **Storage:** 32 GB; **Camera:** 5 MP rear, 2 MP front; **SoC:** Intel Atom Z3735G; **CPU:** 1.8 GHz quad-core; **RAM:** 1GB; **Operating system:** Windows 8.1; **Connectivity:** 3G, Wi-Fi, Bluetooth

Contact

HP India Pvt Ltd
Phone: 1-800-180-1810
Email: hpestore.in@hp.com
Website: www.hpshopping.in

The Stream 8 doesn't offer a very fancy design, rather it goes for a standard plastic build. The front has an all glass panel which has the 8-inch display underneath. The bezels are fairly well placed and not very large leaving enough room to hold the tablet. The tablet offers a thickness of about 9 mm and with a weight of just 388 gms, it doesn't feel very heavy.

The Stream 8 runs on Windows 8.1 and comes loaded with 1 TB of free One Drive cloud storage and Office 365 for one year. The app UI and the desktop mode, both work perfectly fine and you can easily install apps and software. The touch-screen is quite responsive and typing on the tablet doesn't feel cumbersome at all. The tablet is powered by an Intel Atom Z3735G



Price
₹16,990

quad-core processor clocked at 1.8 GHz with 1 GB of RAM. This combination provides enough power to the tablet for extensive multitasking and even occasional gaming as the Windows app store does offer some good looking titles. The tablet can handle full HD videos with ease and games like Asphalt 8 didn't show any signs of lag or frame drop.

Power consumption is not bad as it comes with an 8 hour 20 minute rated battery backup and we managed to squeeze out almost 8 hours out of the tablet.

The tablet is not as powerful as an affordable netbook, but in its range, the Stream 8 is probably the smoothest Windows based tablet we have tested.

Kunal Khullar

Gigabyte GeForce GTX 970 G1 Gaming

Despite the controversy, it's still a good card

We'd reviewed Gigabyte's GTX 960 G1 Gaming two months back. The design of the GTX 970 G1 Gaming is very similar to that of the GTX 960.

Both cards have a pretty decent overclocking headroom and start off a little ahead of the stock card as far as

base and boost clock speeds are concerned. The GTX 970 G1's clock speed of 1175 MHz is 125 MHz greater than stock card and compared to the ASUS STRIX GTX 970 this SKU with it's higher clock scores better in synthetic benchmarks by a margin of around 7 percent but gaming benchmarks only revealed a 3-5 percent lead over the other.

When it comes to cooling performance, the extra fan on the Gigabyte SKU resulted in a difference of four degrees Celsius at peak load. Idle temperatures weren't differentiated by a noticeable amount.

The recent unravelling regarding its memory arrangement has raised quite a few questions about the viability of the GTX 970. The fact is that as long as the game in question does not exceed 3.5 GBs of VRAM usage, you aren't going to feel any of the side-effects. So if you are running your

games on a 1080p display then fret not, the only thing that can cause greater RAM usage on a 1080p display is poor coding or using high quality texture packs or enabling Dynamic Super Resolution. So keep that in mind if you are going in for a GTX 970.

Mithun Mobandas



Price
₹36,800



Performance..... 62
Value 75
Build 69

Specifications

Base clock: 1175 MHz;
Memory clock: 1750 MHz;
Stream processors: 1664;
Texture Units: 104, **ROPs:** 64; **Memory:** 3.5+0.5 GB;
Power Connectors: 8Pin + 6Pin; **TDP:** 150 W

Contact

GIGABYTE Technology
Phone: +91 9810494944,
Email: mayank.sharma@gigabyte.com
Website: www.gigabyte.in



VR Jedis

Sixense's virtual reality tech can turn Oculus Rift users into Jedis
<http://dgit.in/OculusJedi>



Fastest Chromebook?

Acer revealed its upgraded Chromebook powered by a Core i5 5200U processor and has claimed that it's the fastest ever <http://dgit.in/ChroAcer>

ZOTAC GTX 960 AMP! Edition

An economical hot-head



Price
₹17,490

With the advent of the 900 series every single manufacturer seems to be paying extra attention to the build quality of their SKUs and ZOTAC is no stranger to this trend. After all, we haven't noticed any significant difference when it comes to FPS in

games between all the SKUs so giving the consumer their money's worth has led to some interesting developments with the build quality. The GTX 960 AMP! Edition features a moderate overclock going by what Maxwell chipsets are capable of but it still uses just one 6-Pin power connector. Synthetic benchmarks didn't put the card ahead of the competitors by any thick margin either and the operating temperatures turned out to be a tad higher than all other GTX 960s we've seen so far.

This particular SKU has some element of the chassis covering the PCB from all sides and there are two fans for the cooler, both of which have blades angled to ensure higher static pressure. Despite all of this the peak load temperature was 75 degrees Celsius which is a little too much. Overall, it's a nice thing to see mid-range cards getting a lot more love. Performance wise this card is in the vicinity of every other GTX 960 and at a price of ₹17,490 it becomes a more attractive option.

Mithun Mobandas



Performance.....46
 Value96
 Build60

Specifications

Chipset: GM206; Base clock: 1266 MHz; Memory clock: 1753 MHz; Stream processors: 2048; Texture Units: 128; ROPs: 64; Manufacturing process: 28 nm, PCIe 3.0, 4096 x 2160 digital resolution support, 2 GB Memory; DirectX support: 12; OpenGL support: 4.4; Power Connectors: 6Pin; TDP: 120 W; Warranty: 3 years

Contact

Aditya Infotech Ltd
 Phone: 120-4555666
 Email: sales@adityagroup.com
 Website: www.zotac.com

V-MODA XS

Razor sharp, in more than just the looks

After having tried the V-MODA Crossfade LP last year, the XS was something we were looking forward to. The XS follows a similar angular, transformer-like, almost industrial design language. It also adheres to its rugged pedigree, in fact, this time around upping it a notch by passing 810G military tests.

Traditionally, on-ears haven't been a very attractive category primarily because of comfort being an issue. However, off late there has been an upsurge in the number of on-ear releases. The category is so popular in fact, that at the time of testing, we had with us two of the most highly regarded on ear headphones in the market today – the Harman Kardon CL and the B&W P3. We hooked up all



Price
₹14,990

of them to the trusty old Sonar Essence STX and what followed next was an extended listening fiesta.

With the XS, the first thing you notice is that the tonal clarity in the higher end of the spectrum is brilliant. Highs are represented quite well, so well in fact, you'd be quick to dismiss them as being too sharp. The funny thing though is that the sharpness grows on you. Who can say no to detail right? While listening to Selkies by Between The Buried And Me, for instance, the sparkly sibilance of the cymbals (in the softer parts of the song), turned from annoyance to nuance. There is a flipside to this though - the vocals take a beating because the mids lack body. What of the bass? As Tuco Salamanca puts it, it's "tight tight tight!"

Now comes the subjective aspect of audio appreciation. If you are someone who appreciates detail you can't go wrong with the V-MODA XS. Personally, I'd rather go with the more fuller-sounding and seemingly delicate but slightly more expensive B&W P3, or the sweeter and cheaper HK CL.

Siddharth Parwatay



Features75
 Performance.....80
 Build80
 Value65

Specifications

Frequency Response: 5 Hz - 30,000 Hz; Impedance: 28.5 Ohms; Cable Type: Kevlar Reinforced; Plug Type: 3.5 mm Gold; Sensitivity: 105 dB @ 1 kHz; Weight: 195 g

Contact

Headphonezone
 Website: www.headphonezone.in
 Phone: +91 7506646988
 Email: direct@headphonezone.in



A smaller Windows 10

Microsoft is trying to reduce the overall size of its upcoming OS so that it uses less storage on devices. More here: <http://dgit.in/Micro10>



Halo 5: Guardians teaser

Halo fans rejoice! Bungie recently revealed a teaser trailer of the upcoming Halo 5: Guardians game. Watch it here: http://dgit.in/Halo5_Guard

Bazaar

Xiaomi Redmi 2

Xiaomi doing what it does best

Incremental innovation with each iteration only advancing by a miniscule amount isn't something that consumers look forward to. However, with the Redmi 2 the change is enough to make it a viable upgrade. The Moto X (2nd Gen) is a good example of this. The device corrects almost every flaw that the older version had, giving us a true flagship smartphone. The same is true for the Xiaomi Redmi 2, which has just been launched in India.

While the smartphone market is flooded with manufacturers now, Xiaomi is a little different. The company has to meet the demands of a consumer base that wants the highest possible specifications at the lowest possible price. That's easier said than done. Take the reaction to the Xiaomi Mi4 for example, the 20k price tag was shunned by many, who expected yet another 14k titan like the Mi3.

This is the path that Xiaomi has chosen though, and looking at the Redmi 2, the company isn't deterred. The newest budget offering from Xiaomi is every bit the device that we expected from them. The company has kept the overall design language followed in the Redmi 1S, but with important changes. The Redmi 2 is slimmer and 15 grams lighter, which adds to its appeal. It's feels very light and just the right size. The overall size is a few millimeters greater than the Moto X (1st Generation).

Moving on, the display on this one remains at 4.7 inch 720p with a Dragontrail glass surface. The Redmi 2 comes with MiUI 6 though, which makes the user interface look way better than the previous OS version. The overall touch experience is smooth and the Dragontrail surface promises an almost complete scratch resistance. Yes, we've tried to scratch it with knives and we've failed.

The display is quite sharp and has a much better overall feel than both the Lenovo A6000 and the Moto E (2nd Gen). The viewing angles are



Price
₹6,999

narrower than what we would have liked, but not too much to be a problem.

Further, since compromise on specs is not an option for Xiaomi, the new Snapdragon 410 64-bit quad core SoC is what powers this device. Benchmark scores go over 20,000 on AnTuTu for this smartphone and it can take pretty much everything that you throw at it. Yes, the GPU on the Snapdragon 410 is not the best, but it's more than satisfactory for the budget segment. The Redmi 2 handles games like Asphalt 8 and Marvel: Contest of Champions with minimum issues.

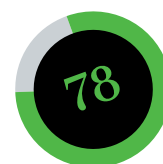
If you've read our review of the Redmi 1S, then you would know that we loved the camera

on that device. The Redmi 2 carries the same 8MP camera, but with MiUI 6 the new camera app that's included greatly increases its potential. For instance, the new camera app now comes with manual exposure control which is very useful. The Redmi 2's camera is better than the Lenovo A6000 and delivers images with higher fidelity and better white balance. It's also pretty good under low light for the price.

Lastly, the area where the Redmi 1S lacked the most was the battery. The 2,200 mAh battery, though still not the best, is at par with the new Moto E and Lenovo A6000, and better than the Redmi 1S (which lasted five and a half hours under our batter test). When we put the Redmi 2 through the same test it ended up lasting for about six and a half hours and on regular usage, we could get it to last an entire day with some amount of frugality.

All said and done, the Redmi 2 is definitely the best budget smartphone to buy right now. At ₹6,999 it provides good value and that improved camera makes a big difference. Xiaomi's flash sales could be an issue for some, but if you can get your hands on one of these then go right ahead.

Prasid Banerjee



Features.....	79
Performance.....	75
Design.....	83
Value.....	71

Specifications

Display: 4.7-inch 720p;
Processor: 1.2 Ghz
Qualcomm Snapdragon
410 64-bit quad core;
Operating System:
Android 4.4 with MiUI 6;
RAM: 1 GB; **Storage:** 8
GB, expandable to 32 GB;
Camera: 8 MP rear, 2 MP
front; **Battery:** 2200 mAh

Contact

Xiaomi India
Phone: 1800 103 6286
Email: service.in@xiaomi.com
Website: mi.com/in



Smart phone locking

On-body detection feature on Android Lollipop devices will now the screen unlocked while you're holding it. More here: <http://dgit.in/LockSmart>



360° video uploads

Now you can upload as well as watch 360 degree videos on YouTube. It also released a list of compatible cameras http://dgit.in/360_Video

Antec GX900

A well built case that's easy on the eyes as well as the wallet

Cases with that same old brushed metal or plain black look have been done to the death. This is why when we see something like the GX900 from Antec, with its military look, it generates a bit of an enthusiasm. It isn't as if we've never seen cases with a military theme before, but a new addition is refreshing. For starters, the GX900 features a camo green plate at the front with aesthetically placed screws holding it. Moving on to the top you'll find a bright red power button alongside the



Price
₹5,876



Features	76
Performance.....	71
Build Quality	77
Value for money	75

Specifications

Dimension: 450(H) x 210(W) x 435(L) mm; **Motherboard Support:** ATX, micro ATX, mini-ITX; **Expansion Slots:** 7; **Form Factor:** Mid-tower; **Drive Bays:** Toolless (x2) 5.25-inch, (x4) 2.5-inch, (x3) 3.5-inch; **Cooling:** Rear 1x120 mm (optional), Front 1x120 mm + 1 optional, Top 2x120 mm (140 mm optional), Bottom 1x120 mm optional; **Front I/O:** (x2) USB 3.0, (x2) USB 2.0, Audio jacks; **Weight:** 6 kg; **Warranty:** 2 years

Contact

Antec India
Phone: 91-44-24512288
Email: indiainfo@antec.com
Website: www.antecindia.co.in

inbuilt fan controller and USB ports. We established that the power and reset buttons had enough play and they were certainly a departure (in a good way) from the little spring loaded push-to-on buttons we've seen on cabinets lately. The side panels have handles at the back which protrude outwards to add to the case design and also provide extra room for cable routing behind the camo green motherboard tray. The tray has an adequate number of cable routing holes. The use of thumb screws on the drive cage panels for switching support from 3.5-inch to 2.5-inch drives helps. The GX900 maintained its cool at 33.5°C internally at full load and with a room for extra fans at the rear and bottom, you get more cooling options. At the price, the GX900 is a great option to consider if you're building a low to mid-range gaming rig with the right looks.

Siddhant Sharma

BoAt Pitcher

Loud, attractive and at an interesting price point

BoAt is a brand that I'd honestly not heard of prior to testing this device. This meant that I had absolutely no idea what to expect either. When opening the box and extracting the speaker, one thing was certain though – a lot of love (and money) went into the packaging to give it that premium feel.

The speaker itself is an oddity. It's called the pitcher and does indeed look like one. The translucent body and muted colours make it look quite attractive. The size is a little unwieldy because the diameter is a little more than what you can grab comfortably grip. Thankfully they've given a neoprene carry sleeve which comes with a strap with which you can easily hold the device. The case is

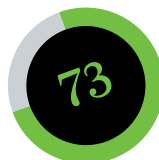


Price
₹3,990

quite well designed as it leaves the play/pause and volume controls accessible but more importantly the speaker grille situated on the top of the unit too remains open so that the two drivers don't get muffled.

The speaker is loud. But decibel levels are proportionate to its size so nothing to write home about. Also, pushed beyond the 90 percent volume mark it does start to distort. But the audio quality at normal volume levels is surprisingly decent for this speaker. The passive radiator works well enough to produce distinct lows while the two full range drivers do their job well enough.

The high grade packaging makes it a good gifting item. How much will it set you back by? The BoAt Pitcher can be found online for around ₹3,250. If size is not at all a concern, then it is a good option to consider if you're looking for something between the Logitech X100, which retails at about ₹1,599 and the Creative MUVO mini which has a price tag of ₹4,499.



Features	70
Performance.....	70
Build	75
Value	75

Specifications

SNR: 80 dB; **Frequency response:** 65-18,000 Hz; **Dimensions:** 110x110x113 mm; **THD:** <0.2%; **Rated battery life:** 10 Hrs

Contact

Imagine Marketing Pvt. Ltd
Website: boat-lifestyle.com
Email: info@imaginemarketingindia.com
Phone: 02242102403

Siddharth Parwatay

VIVALDI BROWSER

There's a new desktop web browser in town and it's gleaming appreciation from everyone. Called Vivaldi, the browser resembles Opera (the popular browser that's available across multiple platforms) and hosts a number of features similar to those previously cherished in the two-decade old browser. And there's a reason for it – Jon von Tetzchner, the man who co-founded Opera, has developed Vivaldi.

Vivaldi is specifically aimed at power users and it's designed to give them back the advanced features of Opera that the Norwegian firm had dropped from its browser when adopting WebKit and Chromium technologies.

Please note that Vivaldi is still in its technical preview phase and thus not completed software. So basically it's a prime candidate for us early adopters to try out. It's available for Windows, Mac and Linux.



From the maker of Opera, comes a neat, modern looking browser called Vivaldi



Turn off images

One of the handiest features in Vivaldi is its ability to quickly strip images from web pages. If you're on a slow network or just don't want to exhaust your data plan, turning off images can do wonders. To do this, click on the gallery (canvas) icon on the bottom right of the status bar below and select 'No images'. This will reload the website without displaying any image(s).



Vivaldi browser.....13

Remote computing.....15

{ Tips & Tricks has its own page numbers, and does not follow the rest of the magazine's page numbers. This is done to ensure that you can cut out and save T&T in a separate folder for later reference. }



Built-in notepad

Came across something interesting on the web? Can't decide between EverNote, OneNote, and a plethora of other note-taking applications out there? Just use Vivaldi's in-built notepad. The new browser allows you to quickly scribble important things in its 'Notes' pane. You can open it by clicking the notebook icon on the left menu bar. The browser also gives you a single-click option to add a screenshot of the web page as well as add its URL to the note. It



Quickly add notes with Vivaldi's built-in notepad

saves notes and screenshots in the browser itself so no cloud account just yet.



Stack similar tabs

You open an important link and then another. Within no time, your browser is clogged up with too many tabs. What do you do then? Chrome, Firefox, Safari and Internet Explorer – the four frontrunners in the browser space either don't consider it a big problem or are struggling to find the right solution. Vivaldi is addressing



Turn off images to save bandwidth and load web pages faster

that with something called "stacking", wherein it allows users to group similar tabs (or whichever tabs you think should go together) and save space. To stack different tabs, open a new tab and right-click on it to select 'Collect tabs to stack.' This will allow you to have more than one tab placed under the new tab. You can ungroup the tabs by clicking on 'Expand the tabs,' if required.



Remove ads and other annoyances

Don't like ads and other annoyances that publishers are throwing your way? Block them! Chrome, Firefox and

other browsers support extensions that block ads, they don't have a built-in ad-blocking feature that could do that. While Vivaldi doesn't support extensions yet, it bundles a feature called "Content blocker". To enable it, click on the closed arrow icons '<>' on the status bar at the

bottom, and select 'Content blocker' from the options you see. This will reload the page and block everything but the actual content on the website.



Bookmark all tabs

You need to shut down your computer or close the browser for some reason, but don't want to forget all the tabs you were working on. What do you do? Of course, you can always visit the holy History section and go through all the links you visited, but that's such a Chrome-ish thing to do. Vivaldi lets you bookmark all the opened tabs in a single click. Right-click on any opened tab and click 'Bookmark All Open Pages.'



Bookmark all the open tabs in one-click to save your time

more effects in case you want to explore other options. You can change the font to monospace, highlight a particular part of the web page, outline a paragraph and skew the images.



Spice up your reading

Vivaldi lets you add filters to web pages to improve (well at least, change) their appearance. Much like Instagram, where you can add filters and different shades to your pictures to revamp their look, Vivaldi lets you change colours on its web pages. The filters it offers include black and white, grayscale, intensify, invert, obscure and sepia. You can play with them from the same 'Page actions' button (closed arrow icons) from the status bar.



Add effects to pages

If filters aren't cutting it for you, Vivaldi has a range of other effects as well. Want to add a 3D effect to the pages you're browsing? You can do this from the Page Actions menu by clicking on 'Transform - 3d'. There are many



Customise shortcuts

From navigation to different places such as the download panel and bookmark menu to performing advanced tasks such as exiting the browser and importing settings, everything in Vivaldi can be reached using key combinations. You can set up your own combinations by going to Settings > Navigation and locating the Keyboard shortcut options.

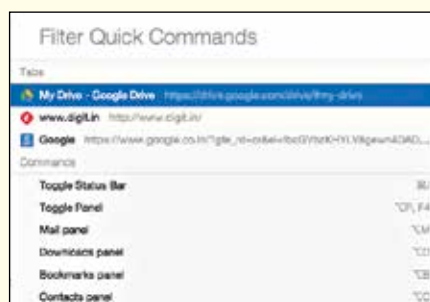
You can also use quick commands. You'll find this option under Tools after selecting 'Show Quick Commands', which allows you to quickly check the keyboard settings.



Quickly import bookmarks

Now that you love Vivaldi, maybe you are considering ditching other browsers and switch to this new amazing tool. To make yourself at home, the browser comes with an option

to import bookmarks from other browsers you use. Go to File and select 'Import Data'. This will give you an option to import bookmarks from several popular browsers but not all. In case of the latter, you will first have to export your bookmarks



Quick Commands lets you quickly find different keyboard shortcuts



Group together different tabs to save space

from the other browser, and then import it to Vivaldi.



Artificial Vivaldi

Vivaldi comes with an intuitive feature called "Fast Forward", wherein it automatically predicts what you want it to do. So for instance, when you search for something on Google, if you click on the 'Fast Forward' button (placed next to the back button), the browser will take you to the next page of the search result. Another example is - when you're reading an article that is paginated (an article or a slideshow which has been divided into several pages), clicking on the Fast Forward button will take you to the next page.



Rewind!

Start researching for a topic on Wikipedia or Google and half an hour later you're

probably reading things completely off topic. Vivaldi aims to help users with such issues with its Rewind option. The Rewind button takes you back to the very first page you had clicked on that same domain. We tested it on a number of websites including Digit.in, Google.co.in, and Wikipedia.org and it worked seamlessly.



No cursor

What if you want to click on links listed on a webpage without moving your mouse? There is a feature for just that. Called "spatial navigation", the feature lets you reach and click on links by pressing the shift key and the arrow keys. As you press that combination, you'll see each link

getting surrounded by blue links, giving you the option to navigate to pages without taking your hands off the keyboard.



Anywhere bar

If you are tired of seeing the address bar at the top, and don't wish to see tabs clogging up on your head, you can change their positions. You can move them to the right, or left, or at the bottom. To change their original position, go to Settings, click on the Appearance section and you will find the options to change it for both of them.



Share

If you came across a link that you want to share with your friends on social media or via email, Vivaldi will soon allow that. The browser will add this option, and also introduce an email client in its upcoming version.



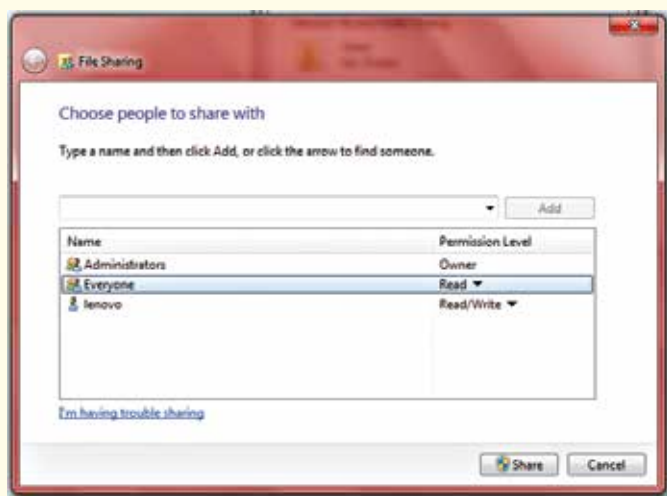
Add different filters to your favourite websites to change the way they look

REMOTE COMPUTING

With so many devices connected to the Internet, it has become almost mandatory to sync data between them. Here we list a few tips and tricks to help you connect all your devices seamlessly.

Access a PC's hard disk on an Android device

You can use your computer as a network server for your phone, but you can only access these files when on the same network.



Add everyone to share the file with everyone on the workgroup.

To get this to work, first share a folder by going to Properties > Sharing Tab > Share. Share with 'Everyone' and click Add. Provide read or read/write permissions, and click Share. Remember the network path.

We recommend open file sharing instead of password-protected to make things easier. Go to Control Panel > Network and Sharing Center > Change advanced sharing settings > 'Turn off password protected sharing'.

On your Android device, open ES File Explorer, slide to LAN tab and press the '+' button. In the server field enter the Network Path (replace the backslashes with forward slashes), enter your Windows username and password and hit OK. You will now access the shared folder.

Stream movies from your PC

You can use the tip above to share a folder with videos, and avoid using any streaming software. You can also use apps such as - VLC Streamer, Air Video HD, etc.

Stream movies from computer to iOS device

Unlike Android, iOS doesn't allow you to access the entire file system on your phone. To stream movies on your iPhone

or iPad, you need a standalone streaming application. There's a wide range of streaming applications to choose from. Our favorite is - VLC Streamer. VLC Streamer is available for free on the App Store. Next, download 'VLC Streamer Helper' for Windows, Mac or Linux from (hobbyistsoftware.com/vlcstreamer) and install it on your computer.

Notifications on the desktop

While you are working on your workstation, chances are you'll end up missing notifications on your phone. One way to stay notified is by using Pushbullet. It is a free app available for Android and iOS, and uses the notification listener service.

To mirror your Android phone's notification, download the app from the Play Store. On your PC download Pushbullet browser extension/add-on for Chrome or Firefox from (<http://dgit.in/PushBulletChr>) and (<http://dgit.in/PushBulletMoz>) respectively and install it.

After installing the app, enable notification mirroring option from the app's settings. Pushbullet uses Chrome's rich notification feature to send notifications to your desktop. Also, Chrome allows you to dismiss a notification on your phone from the desktop, while Firefox does not. With this, all the notifications appearing on your phone will be mirrored to your desktop.

Troubleshoot any Android phone from your PC

It's possible to reach any remotely located Android device from your PC. It comes handy if you want to troubleshoot your friend's phone or tablet. To access a remotely located device, you need to download and install 'TeamViewer Quick Support' app from Google Play Store.

On opening the app, you'll be provided with a user ID and password. Using this ID and password one can access your



Access any part of your Android device from your PC.

phone directly from TeamViewer desktop.

If you are the troubleshooter, on your PC enter this user ID and password. A dashboard will appear on establishing the connection with the device. The Dashboard provides all the general information about the drive, in brief. To switch to the remote session, click on 'Remote control' button located at the top of the window. From here you can access the remote android device using your keyboard and mouse.

Troubleshoot any PC

There are various ways in which you can access a computer from another. One way is by using built in 'Remote Desktop Connection' utility in Windows.

To do this, open Run (Windows + R) and type 'mstsc' and hit enter. The Remote Desktop dialog box will open. Enter the IP address of the PC you want to access and hit connect. The Remote Desktop will appear on your screen.

Note: Remote Desktop Connection utility by Microsoft only works if the other PC is on the same network. If the PC is on a different network (Internet),



you need a third party app. We recommend TeamViewer – the all in one app for your remote access needs.

Download and install TeamViewer from (teamviewer.com). Start the program, and it provides you a user ID and password on the left side. It's the authentication to access



An unique ID and password for your PC is on the left side

your PC. To troubleshoot a PC, install TeamViewer on the other PC and ask for the user ID and password shown on that PC. Enter the ID in the User ID text box located at the right followed by the password. As the connection is established, you'll see the desktop of the other user. That's it! You have full access to the other PC.



Push settings to your iOS device from your PC

TeamViewer Quick Support for iOS allows you to send settings from your computer to any iOS device. To do this, download TeamViewer Quick Support from the App Store. Note the user ID and password and enter it in the TeamViewer on your computer.

The dashboard welcomes you (similar to Android). However, because of the platform restrictions you're not allowed access iOS device remotely from the desktop. Within the dashboard, you will see an option to push settings to the connected iOS

device. If you have the settings file, browse it and send it to the device. On installing the file on the device, you'll get the settings readily.



Transfer from PC to iOS

TeamViewer Quick Support also allows you to send files to your iOS device. Follow the initial steps to connect to an iOS device, and then switch to file transfer, select files that you want to transfer and click transfer. The files will receive on the other device depending upon the bandwidth and size of the file(s).



Start a torrent on your PC from anywhere

If you download a lot, you're probably going to want to be



Setup username and password, and check for accessibility status.

able to add downloads from wherever you are. Not just adding downloads, you may just want to resume a paused download. Thankfully, the uTorrent remote client that lets you start, stop and manage torrent queued on your PC from anywhere in the world.

Setting up uTorrent Remote is very straightforward. Open uTorrent and navigate to Options > Preferences

> Remote. Check 'Enable uTorrent Remote Access', provide a unique computer name and password, and apply the settings.

If you are using Android phone, there's a uTorrent Remote app available in the Play Store. Download it, provide the username and password that you set in the uTorrent settings on the desktop. After logging in, you will see the torrent queue, which can be managed right from your device.

If you are using iPhone, there's no app available in the App Store. iOS users should go to 'remote.utorrent.com', provide the username and password and manage the torrents.



Monitor your PC back home

If you are concerned about someone using your computer back at home when you are away and want to know what activities are being performed

Download and install it on the PC you want to monitor. This invisible client runs in the background and the user who's using the computer isn't aware about it.

Now whenever you want to monitor, just login with your account on activtrak.com and the dashboard will provide the real time stats of the activities being performed on the PC. It keeps the track of applications as well as the browsing history. In addition to this, there's a neat feature to take screenshot, which will let you know what the particular user is actually doing.




Use Mac to place and answer calls via your iPhone

Apple's newly released version of OS X – Yosemite, allows you to place and answer your iPhone calls from your Mac. Obviously, as with every Apple feature, you will need all Apple devices to accomplish this – an iPhone running iOS 8 and a Mac machine running OS X Yosemite.

To use this feature, login to FaceTime on your Mac with your Apple ID. Use the same ID to login to FaceTime on your iPhone as well. Then on your iPhone navigate to Settings > FaceTime and enable 'iPhone Cellular Calls'. Next, open FaceTime on your Mac and set the Preferences > 'iPhone Cellular Calls' option.

Note: Make sure both the iPhone and Mac are connected to the same Wi-Fi network.

Whenever you get a phone call on your iPhone, a notification will be displayed on your Mac with the option to accept or decline the call. You can also place calls from your Mac by opening the FaceTime app, choosing a contact and selecting the 'Call using iPhone' option. 



Titan X SLI benchmarks

Hot on the heels of Nvidia's Titan X launch, first benchmarks with two of them on SLI have surfaced online <http://dgit.in/TitanSLIX>



No man standing!

Participants of the annual Pwn2Own hacking contest were able to hack all the browsers. Read more here: <http://dgit.in/AllHack>

Q&A

Surplus storage problems, and the case of the missing thumbnails

This month's queries aren't the usual perplexing sort. It seems way too many people are glued to their television screens to be bothered with their problems.

Q MBR or GPT?

Dear Sir,

I have one PC which has following configuration:

- Processor - Intel Core i5 2400 @3.10 GHz
- Mother board - Intel DH67BL
- HDD - 2 Nos. Seagate SATA - 1 TB
- RAM- 2x 2 GB DDR3 Strontium
- Operating system - Win 7 Ultimate
- Wireless adaptor - D-Link model - N150 USB Adapter.

Now my total storage capacity is 2 TB, I want to increase this to 3 TB so I want to install a new HDD (SEAGATE SATA - 1TB). Window 7 supports formatting HDD up 2TB capacity. So how can I format the new HDD of 1TB? Is there any BIOS setting for that? For extra storage capacity? Please guide me...

—Milind Jadhav



Use GPT to fully utilise drives above 2 TB.

A Hey Milind,

You are getting confused about the limitations of the NTFS file system. The 2 TB limitation is applicable to a single hard drive and that too if the cluster size is set to 512 KB which is the default value. Since you are going to be running three hard drives which are of 1 TB capacity each, you are not going to run into this problem. However, just in case you do wish to use a single hard drive which is of a capacity greater than 2 TB then you need to do two things. Enable UEFI in the BIOS configuration and then you need to convert your disk file system to GPT to be able to use more than 2 TB of storage space. The entire process is too elaborate to explain here so you can check out this tutorial mentioned here: <http://dgit.in/BIOSToUEFI> Do remember to take a backup of all your valuable data before you begin. It's only a precaution but it's better to be play it safe.

Q Busted flash drive

While I was copying files from my 16 GB SanDisk flash drive to my PC, something went wrong and suddenly the PC got shut down. On restarting the PC, I found that I can see all the contents of the flash Drive and I am able copy the files/folders to PC. But could not write (copy files) into it and can't even delete files and format the pen Drive, as while doing so a dialog box shows appears saying "The disk is write protected". I did a fair amount of research and tried to fix the problem by following these methods which are listed in brief, as far as possible.

1. Diskpart

Use the command "attributes disk clear readonly" on selected disk 1.



Most flash drive errors are easily fixed.

2. Registry edit

Navigating to "HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control" and Creating new key under it named "StorageDevicePolicies". Create a new value, "DWORD(32-Bit) Value" & named it "Write Protect" & entered the "Value data" as 0.

3. Disk management

On context menu of the said Drive, "Format" and few other options found to be disabled (Greyed out).

4. Safe mode with command prompt

Turning on the PC by selecting "Safe Mode on Command Prompt" with the Pendrive inserted. Type "C:\Windows\system 32>H: (where H is my Drive Letter of my pen drive). Then give the command "H:>format H:"

5. Allowing full control

Shared the Pen Drive and clicked "permission" and then clicked "Full Control". After that tried to format it, but in vain.

But none of the above methods could solve the "Write Protect" problem and show some error report on some of them. Firstly I want to know whether above procedures were correct or not. Therefore I request you to kindly help me to fix the above problem

—Bhaskar Dutta



Synchronised Bookmarks

Opera brings synchronised bookmarks across any device running Opera browser and logged in to an Opera account. <http://dgit.in/OperaDownload>



Next Nexus by LG?

Rumours seem to point out that the next iteration of Google's Nexus smartphone will be made by LG <http://dgit.in/Nexus2015>

A Hey Bhaskar,

It's nice to see that you've given it a go on your own and tried multiple solutions before writing in to us. To get on with your query, the diskpart read-only attribute and registry edit methods will work if the firmware on the flash drive is not facing any problems.

That is not the case here, the interruption of an I/O process might have possibly messed up the firmware which now needs to be rectified. So you can use diskpart to format the drive all together with the "clean" command. However, there is a likelihood that an active process linked to the flash drive might block that from happening. So your best hopes lie on either using the 'HP USB Disk Storage Format Tool' or you can use gparted in Linux to format the flash drive too.

Something seems off

Hello,

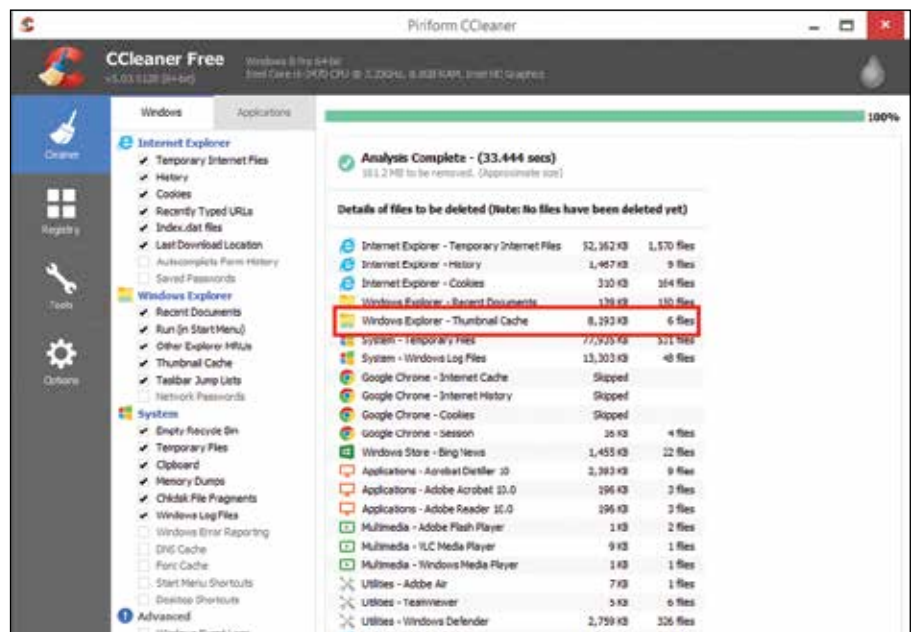
I have a Compaq CQ3050IL and I have not changed the hardware. It is the same Core 2 Duo E7400, 2 GB DDR2, 320 HDD, Msi Boston ver 1.0. The Problem is that it does not start. When I turn the PC on, the LED on the Start button turns on and the processor fan tries to spin, but does not spin and the led stays on for awhile and then turns off.



Step-by-step elimination always helps.

I know it is time to change the rig components but as I am a student I do not have enough money to do the changes. I have already tried changing the ram to the other slot, but it does not work. I hope that my problem would be solved by sending this mail.

—Rachit Rai



You might lose your thumbnail cache if you don't pay attention while spring cleaning.

A Hello Rachit,

Given the description provided it seems that any component could have gone bonkers. The primary suspects seem to be the motherboard, heatsink, SMPS, RAM and power switch. So there is no quick solution to your problem other than swapping each component out for working ones to narrow down the faulty one. Your onboard graphics solution could have given up or one of your RAM modules might have developed a fault. The possibilities here are endless and pointing out a single culprit without information is really difficult. You should start with your RAM, (putting them in a different socket does help but you'll need a working module to do a swap) and then move to your SMPS and go on from there. Along the way, one of the swaps will make the PC function again. Simply replace the component and that should be all. It's a long and tedious process and you'll need to arrange for working components that are compatible with your system.

My precious thumbnails

Hello Team Digit,

I am having Windows 7 Ultimate installed in my laptop. I defragmented local disk C, soon after that all the thumbnails of videos and songs disappeared. I tried two

methods, firstly I tried to uncheck 'Always show icons, never thumbnails' in the view tab and the second one of local group policy editor where I disabled 'Turn off taskbar thumbnails' both did not work. So please tell how I can bring back the thumbnails. Thanks in advance.

—Ashish Hiremath

A Hey Ashish,

It seems you've done some spring cleaning with your computer. If you've used some cleaning suite to perform a set of maintenance actions then it is likely that your thumbnail cache files (Thumbs.db) have been deleted as well. Since a defragmentation was performed, it is unlikely that those files can be recovered using a recovery software since the hard drive sectors have most probably been written over.

Your only solution is to manually regenerate thumbnails. This is done by switching to a thumbnail view mode in Windows Explorer and scrolling through each folder so that the thumbnails for each file are regenerated as they are accessed one after the other. If you're bothered about just the songs and videos then running a media management software will download thumbnails and store them separately. We recommend Plex if this is the case. **d**



Wear improved

The immensely useful Android Device Manager is now available on Android Wear with the find my phone option. <http://dgit.in/DevWear>



The Cubi mini-PC

MSI launched the Cubi, which is an extremely tiny desktop PC with a host of useful features http://dgit.in/Cubi_Mini

Workshop

Creating and Optimizing gifs

Tired of not finding the appropriate meme at the right time? Learn to make your own GIF!

Ashesh Lal

readersletters@digit.in

If a picture speaks a thousand words, a GIF might just be the digital equivalent of penning *War And Peace*. Think of the countless times you've chuckled at a GIF on a thousand different subreddits. Now imagine an Internet where animations using GIFs wasn't supported. What a dull static internet that would be right? One thing's for sure, we would have fewer cats out there. Read on to find out why this 28 year old technology is still relevant till date and learn how to use it to your advantage.

The Graphics Interchange Format (better known by its acronym GIF) is a bitmap image format that was introduced by CompuServe in 1987 and has since come into widespread usage on the World Wide Web due to its wide support and portability.

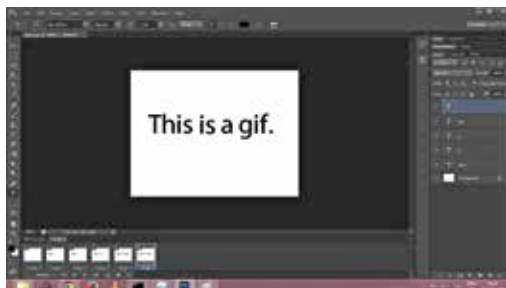
A GIF gets the point directly across without having to wait for too long and makes it the ideal format to use over a short video clip which takes time to buffer although playback options for GIFs remain very limited. The format is also quite commonly used in games for sprites which need a constant presence without increasing the CPU load and processing time.

Getting your hands dirty with Photoshop

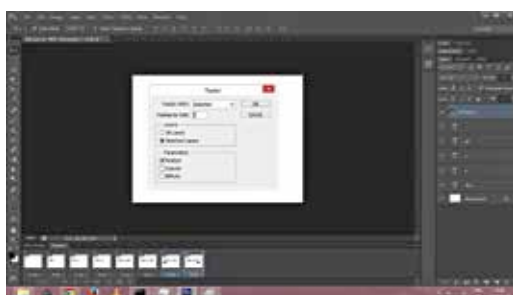
This simple tutorial combines the two most common animation techniques in Photo-

shop: Turning layers off and on, and using the Tween command to animate the movement of an object on a layer.

1. Find a suitable collection of images to make a GIF out of. Or formulate the idea for an animation.



Still Image Animation - Frames for each layer to be animated are made independently



Tween Settings - The Tween Settings Dialogue Box

2. 1-3 seconds is ideal for a GIF, 5 seconds is probably pushing it and anything above 10 seconds would be choppy and very hard to work with as the size would be very large.
3. Open Photoshop and set up layers.
4. Open Window > Timeline
5. Go to the dropdown for the Timeline panel and select the "Make Frames from Layers" option
6. For all the frames, enable visibility for

all the layers that are below the currently visible layer.

7. Drop Down Panel > Copy Frame. Drop Down Panel > Paste Frame > After Selection.
- 8a. Add a black rectangle to the new frame.
- 8b. Reposition the rectangle elsewhere on a new frame.
9. Drop Down Panel > Tween... (After selecting Frames 7 and 8).
10. The image provided shows the variety of options provided in the Tween Dialogue Box. It is recommended to play around with the options to get a better understanding.
11. Enable the visibility for the Background Layer along with the other layers for frames 8-12.
12. Add delays of 0.1-0.2 seconds on each frame.
13. You could even duplicate layers 7-13 and reverse the frames using the drop down panel.
14. Drop Down Panel > Optimise Animation...
15. File > Save for Web...
16. The image provided shows the options available in Photoshop while trying to save an animation in the GIF format. The GIF 128 Dithered Preset has been selected but feel free to play around with the controls such as the image size, quality, the colours in the Colour Table and Looping Options for repeating the animation once or forever.
17. 'Selective' is default for the colour reduction algorithm as shown in the image.
18. Preview the animation in a browser and optimise further if necessary. Optimisation is done by reducing the image size and the number of colours.



Descent returns to PC

Descent Studios decides to bring the Descent franchise to PC with the launch of 'Descent: Underground' in March 2016. <http://dgit.in/DescentUnderground>



OpenGL 3.1 benchmark

Rightware launches Basemark ES 3.1 app to test OpenGL 3.1 benchmarks on different Android devices. <http://dgit.in/BasemarkES>

19. Once satisfied, hit "Save".

20. Upload the GIF on your favourite GIF supporting website such as Tumblr, Imgur or Twitter.

If you're looking to make a new 'Thug Life' meme from a video, then follow these quick steps to convert videos to frames which can then be manipulated similarly.

1. Import Video into Photoshop – File > Import > Video Frames to Layers
2. In 'Range to Import' dialogue box,
 - a. Trim the video to the appropriate length using the slider controls.
 - b. Limit to every 2 or 3 frames based on length of the video
 - c. Select 'Make Frame Animation'
 - d. Hit OK.
3. Open the Timeline Panel - Window > Timeline to see the various frames. The delay would be set at a default 0.4 seconds. Play the animation and if you're satisfied, save the animation.

Converting a GIF into a gfy HTML5 video

The site gfy.com is a spare-time project by Canadians Joey Conrad and Dan McEleney, two 37-year-old tech professionals living in Alberta. They got frustrated with the slow load times of certain GIFs and decided to make a solution by giving video-like controls



gfy.com - Homepage of website

to a GIF. A gfy is a short, looped, soundless video moment that includes GIF as one of the available formats. The name stands for "GIF Format Yoker" (we pronounce it "jiffy") and the purpose is to bridge the gap between GIF and HTML5 video by providing both -- allowing users much faster delivery, and more playback options such as play in reverse, slo mo, speed up, and more.

To fetch a URL, just type gfy.com/ fetch/ before the link (Ex: gfy.com/

GIFs for everything:

The internet knows the importance of GIFs and the tediousness involved in creating and manipulating GIFs. Reaction GIFs have become the new norm for replies on places such as reddit and it can be a daunting task to find the right GIF quickly. For this reason, imgur provides an archive for finding reaction GIFs easily at <https://reactiongifsarchive.imgur.com/> and if you want a more easier search then visit <http://www.reactiongifs.com/> and get your ready-to-use GIF by answering one of two questions -- I AM FEELING... or MY ANSWER IS... from a drop-down list of options.


Thinking of making a GIFs of your own? Here are the options that exist for you:

1. If you've found a clip on YouTube, then you could use http://dgit.in/Make_GIF or the Chrome Plugin MakeGIF available at <http://dgit.in/ChroGif>
2. If you've found the clip on Vimeo, then you'll have to download the video using KeepVid and trim it later using your favourite video editing tool which can then be converted to a GIF using http://dgit.in/GIF_Gen video to GIF option.
3. If you're an iOS or Android user, then you can choose between Cinemagram and GifBoom. Cinemagram comes from the iOS platform and is the best for creating and sharing GIFs on the go, while GifBoom supports all Android phones (ver. 2.2+) but for the best experience ver.4.0 and above are preferred.
4. For desktop users, GIMP is available for free and Photoshop is the industry standard with the immense control that it provides. Photoshop CS2 can be purchased for free but through the course of this article, Photoshop CS6 has been used under a 30-day evaluation period that you can try as well with an Adobe ID.

fetch/<https://imgur.com/6HGtaSd>) and the download and conversion will automatically start. While uploading images on gfy.com, check the options for "Do Not Resize" for resizing larger videos that might take a lot of time to upload and "Ignore Existing" to create a new hotlink for an already existing resource online, as per requirements. After the gfy is created, it can be in three sizes given by a colour code representation as - green: zippy.gfy.com (under 1mb), yellow: fat.gfy.com (1-3mb), and red: giant.gfy.com (>3mb)

"We thought it would be fun to do it differently. Our URLs consist of this structure: AdjectiveAdjectiveAnimal. This is enough to give us a namespace of billions, while also letting humans write them easier." This is a great way to remember the links and although most links are not case-sensitive, to retrieve the gfy from the content delivery system in place, the hotlinks have been made case-sensitive. The options for hotlinking are given in the image. With Reddit Enhancement Suite for Firefox, the hotlinks can be directly loaded on the page without going to another link on Reddit. The update coming soon to Chrome.

The GIF that was created through the tutorial can be found at <http://dgit.in/>

MadeGIF and is available in mp4 format at <http://dgit.in/TutGIF>. A lot of options for replacing GIFs have been tried in the past like using Animated PNGs (APNGs), Scalable Vector Graphics (SVGs) with JavaScript or SMIL language used for animations, CSS3 created animations as well as HTML5 canvas objects which can be manipulated through code. Imgur now converts all the GIFs to mp4 or WebM formats depending on browser compatibility and claims that the file sizes are much lesser as there has been immense progress in video compression over the years with the x264 compression that is available for free usage. However, as support for gfy.com increases due to its much smaller size, much larger colour set, provision of GIFs as a fallback option and lack of coding required, the question is if the GIF 87a and 89a have finally aged to extinction as HTML5 videos as a package delivery mechanism is supported by more websites (such as Facebook that does not currently support GIFs). However, Google did just release support for GIFs in its Messenger app and since the number of GIFs are much much more than the number of vines and snapchats on the internet, it is thus going to be probably relevant till the time a GIF-to-gfy converter comes along within the browser. 

Industry connect

Why are PC sales going up and how is the world of dating going to change? Find out here.

Work @ tech

Building a great resume is not easy. Here are a bunch of tools that will make that job easier

CAREER IN ROBOTICS ENGINEERING

Prepare yourself for a job in Robotics

Robots are great fun to work with! If you're an Electronics Engineer with strong computing and mechanical skills, Robotics can be a promising career choice for you!



Mandira Srivastava
readersletters@digit.in

Whether you're leaving school, facing unemployment or thinking of changing your current career stream, making a good career decision, one that you won't regret in the future is a daunting task for everyone. Most people tend to choose their potential career based on what they're capable of doing right now. However, not all careers fit this mold. While some careers

may lead you to attractive, high-paying but boring jobs, other careers may lead you to find more joy and satisfaction in what you do. Robotics certainly fits into the latter category.

When you hear the word 'robot', your first thought could be yet another bad sci-fi movie in which an android-like mannequin is staring menacingly at the camera. But robotics has developed far beyond the realms of science fiction, and robots are everywhere right from tiny Android-based Antbots, heavy traditional industrial manufacturing machines, spy

drones to nursing machines providing care to the elderly population. The advancement in information technology, computing, artificial intelligence and telecommunication technologies continue to bridge the gap between cyber and physical worlds, enabling the robotics industry to flourish even faster.

What are the key drivers behind the growth of the Indian Robotics market?

The size of the Indian robotics market is expanding and most of the current market growth is concentrated in the Automotive and Electronics Assembly markets. As Indian manufacturing companies are adding more robots to both, their manufacturing and distribution centers, the demand for cost-effective robotics systems is also increasing, pushing local, small robotics companies to grow.

Despite lack of standardisation of robotics processors and other hardware devices needed to run robotics applications, all entrepreneurs, Robotics Engineers and educators we spoke to voiced a similar sentiment and they're clearly optimistic about the use of Robotics in various industrial segments in India. Aakash Sinha, a Robotics Scientist, Founder and CEO of Omnipresent Robot Tech and finalist of US Defence's DARPA Robotics Grand Challenge said, "Robots are going to be as ubiquitous as mobile devices and smartphones are today. A revolution is going to happen in robotics where robots will fight wars, protect borders and assist the elderly and disabled."

On the similar note, Raju Vanapala, an entrepreneur, Founder of Way2SMS and CEO at LearnSocial.com said, "Applications and robots did not grow substantially until the 20th century. But today, robotics is a rapidly growing field. As technological advances continue, research, design and building of new robots will serve various practical purposes — whether domestically, commercially or militarily."

The key reason for faster adaptation of robots in industries is that these robots are cheap (thanks to the availability of lower cost components) and advanced enough to perform multiple tasks equally well.



Well, that was quick!

EVGA has already announced the availability of its GTX Titan X HydroCopper edition GPU primed for liquid cooling http://dgit.in/EVGA_TitanX

Lego Jurassic Park

A daughter along with her father recreated the original Jurassic Park using Lego's worth over \$1,00,000 <http://dgit.in/LegoJur>

What does Robotics Engineering involve?

Robotics Engineering deals with the development, design, operation and application of robots run by computer systems for their control, sensory feedback and information processing. Most of the robotics systems present today are being developed on the principles of electronic engineering, mechanical engineering and computer science and mathematics. So, the Robotics Engineer is a professional who has an in-depth knowledge about mechanical engineering with specific skills and expertise in the field of robotics.



Aakash Sinha, Founder and CEO, Omnipresent Robot Technologies Pvt. Ltd.

Fellow-IEEE and faculty at The Robotics Institute, Carnegie Mellon University said, "The growth in robotics industry in great, but it is not always recognised as "robotics". There is no strong distinction between automation and robotics. Demand is high, but many employers do not have good understanding of what graduates of robotics programs can do for them."

"There will be a huge demand for engineers in the field of robotics in the US and other developed countries", says Pankaj Saxena, Retail IT Consultant and Founder of Brampton Robotics, and also believes that India can utilise its creative talent in defences and other industries in the country.

What's the demand like for Robotics Engineers?

India is slowly becoming a hub for the production of industrial robots. Many American, Korean and Japanese firms are considering setting up Indian manufacturing centers. Jayant Keswani, Principal Partner & CEO at Milagrow Business and Knowledge Solutions states, "Robotics as an industry has seen significant growth in the past year and Milagrow expects the momentum to only increase in the next few years. Since there isn't any defined government policy on robotics currently, the category has a few small companies and startups which are charting its growth path."

Abheek Bose of Robot Alive, a Bengaluru-based robot technology startup, adds, "We should expect robotics and automation to be extensively adopted in industry and service sectors in another 5-10 years. Once that is established, there will be significant demand for robotics personnel and experts in the market."

There are many opportunities for robotics engineers both, in India and abroad. A professional with an M.E. degree in Robotics can get jobs in industries like space research, banking, gaming, medicine and intelligence and police departments.

Speaking about the world wide growth in the robotics sector, Mel Siegel, PhD,

What are educational requirements for Robotics Engineer?

Robotics Engineers are required to have at least a bachelor's degrees for entry-level jobs. The degree holder in mechanical engineering, related engineering specialties, physical science or mathematics could qualify for a job in robotics engineers. In addition to the educational qualification, you also need to have good problem solving skills, especially concerning mechatronics and other robot-related problems. To solve technical issues, you'll first understand the issue, simplify it and then apply your creativity to innovatively solve problems. Since the robotics discipline is mainly mathematics and physics-intensive, it would be wise to emphasise on these particular subjects at the school level. "Currently, it's difficult to find people with robotics skills. We end up training all our recruits. More than skills, we look for passion in the candidate and robotics involves multiple skills in areas such as

mechanical engineering, electronics and computer science," added Aakash, the finalist of US Defence's DARPA Robotics Grand Challenge. In other words, you should only choose this career if you're completely fascinated by robotics!

Which institutions offer courses in robotics?

Robotics is the field of scientific study that familiarises you with the design and creation of robots. More specifically, as a robotics student, you'll learn how to program a robot and understand its various applications. Some educational institutes offer undergraduate degrees in robotics engineering, which teach students how to apply math and mechanics to create automated machines. In India, Robotics can be studied at the IITs in Mumbai, Chennai, Delhi, Kanpur and Kharagpur. Other institutions that offer similar courses are the Indian Institute of Science at Bengaluru, National Institute of Technology, University of Hyderabad, Jadavpur University, Sri Sathya Sai Institute of Higher Learning (M.Tech) in Prasanthi Nilayam in Tamil Nadu, PSG College of Technology (M.Tech with Robotics as an elective subject) in Coimbatore in Tamil Nadu and Birla Institute of Technology and Science.

Institutes such as the Indian Institute of Robotics at Meerut in UP cater to those seeking a niche and highly specialised qualification in this sphere.

To earn a Ph.D. in Robotics, students must also generally submit a proposed plan for study and a dissertation idea related to areas such as artificial intelligence, robotics and kinetics, or robotics and sensors.

A few organisations such as LearnSocial and

Mumbai-based Techno Gravity Solution offer online courses and programs that expose students to the subject. You can also look online for tutorials on websites such as PlayWithRobots to guide you while building robots. Remember to look for programs approved by the Accredita-



Mel Siegel, PhD and faculty at the Robotics Institute, Carnegie Mellon University



Heading to NYC?

Here's a list of nine popular apps that can help you get around and experience the best of an alien city http://dgit.in/NYC_Max

USB 3.1 motherboards incoming

Seems like everyone will soon jump on the USB 3.1 bandwagon as ASRock revealed two boards with USB 3.1 support at CeBIT http://dgit.in/AS_USB

Work@Tech

tion Board for Engineering and Technology (ABET).

Both, engineers and technicians can specialise in machine automation, medical robotics, cybernetics, quantum mechanical systems, air traffic management and a variety of other areas that utilise robots to make work processes easier for humans.

Robotics enthusiasts can also do fellowships available in research institutes, emphasising on humanoid robotics and computational neuroscience.

You earned a degree/diploma in Robotics, now what?

After attaining a degree/diploma in robotics, you can apply for internships offered at engineering and robotics companies. This internship can provide you with work experience and help you get hands-on experience in the field of your choice. You may consider applying with smaller companies that may not have a high industry profile.

Jyoti Sinha, CFO, Omnipresent Robot Technologies Pvt. Ltd., and faculty at IIIT Delhi states, "A Robotics Engineering degree holder is entitled to work in organisations, go to academic jobs, or open their own robotics startup. Along with a few big companies, some government organisations like DRDO are seeking good, technically sound robotics professionals, offering stable government jobs. To begin a startup, firms like Srijan Capital and Blue Sky Venture can provide you funding for your idea. Other than that, if you're interested in teaching robotics then one can do a Ph.D in robotics that's funded by government or private institutions like TCS and Microsoft research. Later, you can take up a job as a faculty in universities and educational institutes."



Jyoti Sinha, CFO, Omnipresent Robot Technologies Pvt. Ltd.

What are the challenges and advantages of being a Robotics Engineer?

A Robotics Engineer is definitely someone who finds joy in creating something new every day, solving unconventional problems, changing the common perception about robots and making an impact on our daily lives. "Being a mentor for primary and high school students, I see immense interest in these students for learning robotics, applying theories into the practical world and excitedly watching their creations actually

complete the programmed task", says Pankaj Saxena, a robotics engineer, retail IT consultant and Founder of Brampton Robotics, US.

The main challenge for a Robotics Engineer is keeping up with constantly evolving robotics technology and improving their capability each time. When looking for a job, you'll find yourself constantly dealing with companies seeking practical, creative and innovative engineers who can integrate technology into real-life applications.

Jayant Keswani from Milagrow states, "Anyone with great ideas can build a successful career in robotics, and even as hardware will continue to create opportunities, software opportunities will also proliferate and students will do well to focus upon them."



Pankaj Saxena, Founder, Brampton Robotics

How much do Robotics Engineers earn?

Robotics companies are offering decent salaries in India depending upon the experience of the candidate. At a nascent stage of the industry, due to the demand of robotics engineers, one can expect a fat

package. However, there's no standard package for robotics engineers. Your income will depend upon your qualifications, experience, organisation and the position you're being hired for. You could also apply at foreign companies, which usually offer better salary packages. "Given that most companies in the category are either startups and/or small organisations, the salaries are reasonably good, but if compared to some other established industries, they're a bit lower", said Keswani.

Since the industry is poised to grow at a fast pace, improved business performance will bridge the salary gap and ensure a significant growth in salaries over the coming years. Aakash Sinha from

Omnipresent opines, "Robotics engineers are likely to earn higher remuneration than their software counterparts due to shortage of skills in robotics." A fresher who wants to pursue a career in robotics engineering could earn a starting salary in the range of Rs.25,000 to Rs.40,000, while a professional with 4-5 years of experience can get Rs 1,00,000 per month.



Raju Vanapala, CEO, LearnSocial.com

Final thoughts

Robotics in India has many employment and entrepreneurship opportunities for students and professionals who wish to enter this field. This is a lucrative field for budding entrepreneurs looking to set up businesses, producing components and hardware for existing and upcoming domestic and international robotics companies.

If you're interested in building a career in robotics, you should start early. Students can enroll themselves in a high school internship or university co-op student program that will allow them to gain hands-on experience in the field. The only way to learn it is by building a machine and making it work! As the technology is constantly evolving, you must constantly update your knowledge and challenge yourself to look for fun solutions to unusual problems.



Snow Roll

If you thought Flappy Bird was difficult, check out Snow Roll and go absolutely bonkers
<http://dgit.in/RollSnow>



Emerging trend: PC rejuvenation

Laptops, smartphones and tablets may be the talk of the town, but the good old PC hasn't gone away just yet. In fact, desktop PC sales are increasing, even if their pie has shrunk in size. And the trend is expected to continue, according to Ravi Gupta from Intel's Public Sector and Enterprise Solution Group. He tells us why PCs are back in fashion. Excerpts from our interview:

◀ Ravi Gupta, Intel's Public Sector and Enterprise Solution Group

Jayesh Shinde

jayesh.shinde@9dot9.in

Q Consumer desktop sales are down in the dumps. But businesses still invest in PCs, and for Q2 2014, IDC reported PC sales to be rising in India. What's this all about?

Ravi: What we've witnessed over the past couple of years, especially with the explosion of tablets and smartphones, is that it vastly overshadowed the growth of PCs. It wasn't that desktops weren't growing, but that every article, review and the public's imagination at large was captured by smart handheld devices. And that led to this perception that desktops weren't growing. If you look at last year alone, we shipped close to 4.7 million units in India, a majority of which were actually commercial grade desktops. We're seeing desktops being rejuvenated for both consumption and compute experiences on the consumer as well as business side of the PC market.

Q The desktop has transformed in terms of form factors. How's that affecting its chances of a comeback?

Ravi: You see the primary innovations on the PC side are driven purely by usage models which are changing on the consumer side. An unmistakable trend is emerging — that desktops should have show-off value and be easy to use, along

with the added bonus of touch interface, enabling and fulfilling the larger home network, home entertainment function.

If you look at buyers of PC in India, as far as businesses are concerned, they need frequent innovation that makes PC usage exciting, productive and energy-efficient. And the evolution of PCs to Mini-PCs, AIOs, split-screen devices, etc., have all managed to do that. In the last year alone, demand for AIOs and other small form factor PCs with always-on capability, low energy footprint, without compromising on good performance has gone up. So essentially a laptop-grade product morphed into a desktop-like device, and that's where AIOs and Mini-PCs have gained popularity.

Q When it comes to PC buying decisions, do customers prefer powerful PCs over power-saving PCs? Functional vs. desirable, what's in demand?

Ravi: So today's PC buyers are looking at three essential things — bare minimum performance to get work done (productivity), security (since most of their data resides in the cloud), and manageability of devices. The three pillars — productivity, security and manageability — together dictate and influence 70 per cent of buying decisions. The rest 30 per cent is governed by things like power-efficiency, looks and design, etc.

Q Where does the good old PC go from here? Will the desktop ever be replaced in the foreseeable future?

Ravi: From strength to strength! The forecast of desktop PC sales in 2015 is a little above the total number achieved for 2014, so that's great. We expect the figure to be somewhere close to 4.8 million for this year, as far as desktop sales is concerned. We're already at the cusp where the mobility success story is losing steam, and coupled with the incremental desktop buyers both at home and offices, these two trends will drive desktop sales to rise in the coming year. Also, the government's financial inclusion initiative presents a tremendous opportunity for solution providers to deploy desktop PCs to innovate and deliver new automation and user experience models.

As to whether desktops will ever be replaced — a question I've been asking to multiple vendors myself — let me answer it this way. What we used to call a desktop earlier, we now refer to as an AIO, a Mini-PC, Tiny PC, Thumb PC, Portables, etc. We may not see the traditional tall tower sitting around on our desks in the future, but certainly some sort of discrete computing where the user has the option to intervene, to issue commands, to consume and create content, will continue to exist as long as digital systems are alive and ticking. **Q**



Twitter under fire

A female ex-employee of Twitter has filed a class action lawsuit against the online giant on grounds of gender discrimination <http://dgit.in/TwiSue>



Industry Connect

Step aside Tinder, Hinge has arrived

Foraying into the Indian market, dating app Hinge has launched in Mumbai, aiming to spread further soon. Digit got to chat with Justin McLeod, the founder and CEO of Hinge, and Samir Kapadia, who is leading the operations in India, on how Hinge works and also about its plans for India.



PHOTO: DEBORAH COPAKEN

Justin McLeod ►
Founder & CEO, Hinge

Abhijit Dey
abhijit.dey@9dot9.in

A simple search on dating apps throws up an endless list of services and applications on the web and mobile, why should I choose Hinge?

Justin: We think of Hinge as the easiest way to meet the best people for you because we really in the power of meeting through your friends, especially when using social media. This technique lets you meet great people because you'll be meeting people filtered by your social network and since most people meet other people through friends in real life anyway, it's the most natural thing the world. This is very different from the anonymity that forms the basis of most other dating services.

No other dating service is as transparent and as accountable as ours. We start off with a subset of people by connecting them to people Facebook who are friends of friends and third-degree connections, people who are connected to you socially. As you use the app, we learn and understand who you are and parse out your preferences, helping us shortlist the right person for you. If you consider that an average person has 500 friends on Facebook, then you have 25,000 friends of friends and exponentially more third degree connections.

What do your stats say about the user activity on Hinge?

Justin: We have been growing really since the beginning at about 20-30% per month. We initially started in Washington DC in the US, where we launched, and then we expanded to 34 markets in the US. We are now in London and Toronto and also in Mumbai. In terms of user engagement, a typical stat is of all the people that used the app this month, over half of them used it today.

Dating apps are all the rage in India. How do you plan to compete with others?

Samir: I think that the competitive landscape is diverse, when in the past you've seen six new entrants, whether they have just come into the market or got a second round of funding, you're seeing two major trends. The first is this sort of bifurcation between matrimonial and casual encounters and dating, there have been a few that have sat in the middle finding themselves at a paradox of sorts with users but aside from that, one of the things they are doing is focusing on credibility. Having people fill out long, exhaustive forms and all of these precautionary measures that they use to ensure quality control but also to curate a good experience for women and users, we find that we don't have to do any of that. Hinge has the ability to naturally

do that by looking at your own social network. Globally when you're looking at the gender breakdown with these apps, you'll find a sort of 60:40 or 70:30 men to women ratio, Hinge takes in 50:50 and I think that's a powerful statistic. Accountability, that's built in our DNA and that's our competitive advantage.

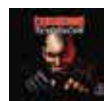
We have observed online dating change through the years, shifting from the web to mobile. How is Hinge trying to bring a change to online dating in general?

Justin: The term online dating, is not even the same thing anymore. When Hinge and Tinder came along, we were using ambient information, so we were using either your Facebook social graph or your current location and we were using that information to introduce you to people in a really lightweight way. And I think that really changed the paradigm for so called online dating because it is so easy, why wouldn't you do it? So, no longer is it a service for desperate people, it's for anyone and I think that really helped break down the stigma. The only remaining stigma is really just legacy left over from the Match.com and OkCupid days. So, I think we are at the forefront at bringing down the barrier and I think it's only apps that makes the process as easy, ambient and tied into your real life as something like Hinge that are actually removing the stigma. **d**



Hardening the Internet

Open Web Alliance stands against IETF's decision of standardization of HTTP/2 protocol
<http://dgit.in/http2disagreement>



Carmageddon: Reincarnation

Carmageddon is back and the new version will be available on Steam from 23rd April. Watch its trailer here: <http://dgit.in/YayCarma>

RESUMÉ ON STEROIDS

It is that time of the year again, when you start building your resume. Here are the web tools that you should be using to revamp your resume

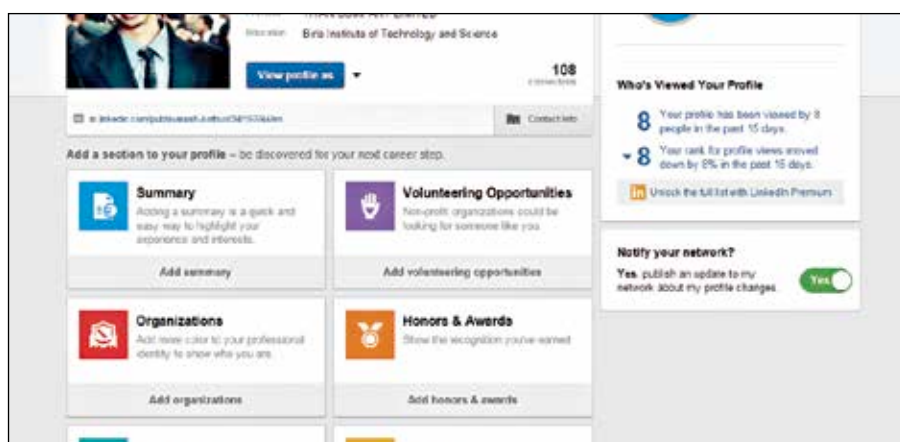
Avinash Kothuri
readersletters@digit.in

The job search of today is radically different from that of a few years ago. It is now much easier for recruiters to find talent online, and vice versa. Some companies even mandate on a Google screening process, where the first page of your Google results actually affects your chances of making it. Therefore, having a solid online presence is critical in order to stand out in today's job market. This means that your physical resume as a standalone document is no longer enough – it needs to be complimented with a visual resume, an online portfolio or a custom landing page that could enhance your online presence. In this article, we list out some of the tools (web & mobile) that can help build your online presence.

First up, we take a look at some online resources that can help you create that ideal resume.

LinkedIn

If we're talking about an online presence to boost your career, there's no better place to start than LinkedIn. If you don't have a LinkedIn profile yet, you better stop reading this article and go create one (and come back to the article after that). It is, hands down, the most important networking step you can take for your career. The first few (usually the top) Google results when you're searched online is your LinkedIn profile, thus acting as your online face for all those prospective employers. And with hundreds of millions of users, it is quite simply the largest professional network in the world



— ensuring that you build a solid network of contacts that might just help you land that dream job.

Sure, there is the odd complaint that it isn't the most apt for certain job roles, or that there's excessive e-mail communication involved, however, there's no debate that the pros completely outweigh the cons.

Bottom line: *Anyone who wishes for his/her career to be taken seriously should have a LinkedIn account.*

CV Maker

(www.cvmkr.com)

When it comes to physical resumes, I'm sure all of us who have had to create one have spent hours struggling to create it using a desktop word processor. That's where CV maker sweeps you off your feet. If making a neat, crisp resume without putting in too much effort sounds good, then CV maker is the perfect choice. One of the first things you notice as you start, is that you don't even need to sign up (you



That cheap?!

According to reports, the Beats by Dr. Dre headphones cost a measly \$14 to make. More here: <http://dgit.in/GreyDre>



ASUS Sabertooth X99

ASUS finally added the covered and funky looking TUF Sabertooth motherboard to its Intel X99 lineup <http://dgit.in/SaberX99>

Work@Tech

can if you want to) to create your resume. You have six different fields to fill, with each field requiring you to fill in certain details. After entering these details and rearranging the fields as per your preferences, you will need to choose one out of five styles for your resume. Although the five styles do their job, you can't help but feel the need for more. And that's it, you're done with your resume that you can now download in TXT, PDF or HTML formats, and share online. Perhaps its only drawback is that it is extremely simple to use – not having much room for customization.

Bottom line: *If you're looking at something that builds a sharp resume without needing to put in too much effort, CV Maker is the perfect solution.*

Accredible

(<https://www.accreditable.com>)

The number of applicants applying for each job profile is crazy – making it so much easier for candidates to fake course-

said course/skill, thus giving your portfolio an organized workflow that clearly highlights your strengths.

Bottom line: *To create a clear & concise e-portfolio that works as evidence for your skillsets, look no further than Accredible.*

Creddle

(<http://credde.io>)

Apart from CV Maker, another site that caught our eye while looking out for good resume builders is Creddle. Similar to CV Maker, it offers a completely free resume-making site that gives you certain sections to fill in and templates to choose from (nine of them) to create a good looking resume with ease that you can then print as PDF or DOCX. However the templates look really slick, making Creddle resumes a lot more visually attractive. And also, if you have a detailed LinkedIn profile, it can automatically create a resume for you by importing details from it. Creddle also lets you quickly create a cover letter

with a nameplate and contact links that match the resume. While it also offers an online presence, a personal landing page or a LinkedIn profile would do much better as alternatives. An interesting aspect is that it can embed the resume on your own site.

Bottom line: *An interesting app that creates good looking resumes without much fuss and can serve as a compliment to your landing page with the embed feature.*

Flavors.me

(www.flavors.me)

If you think your online presence would reflect your personality a lot better with a custom designed website/landing page, then Flavors.me is our pick for you. Like most landing pages, it is designed to showcase a picture at the background with a bio and a set of links over it. However, it is very versatile in the amount of options it provides you. Essentially, with Flavors.me you can create a landing page real quick (within 20-25 minutes in fact) if something simplistic is good enough but you

can also customise many features such as layouts, fonts, links, domain-name, traffic analysis etc. to make it a richer experience. It also gives you free customisable business cards (with shipping charges) that you could use to highlight your online presence, which is really cool. It is easy to use, flexible, powerful (with the paid service), and stylish while at it. It is also compatible with Google Analytics to provide you all the stats you need.

Bottom line: *Simplistic design and an affordable premium package make Flavors.me the go-to option for creating your personal landing page/site.*



Alternate: *We also recommend checking out Branded.me (www.branded.me) as an alternative. It's a cool, nifty site that lets you create personal sites with ease, and also has LinkedIn integration to boot up.*

Re.vu

(<http://re.vu>)

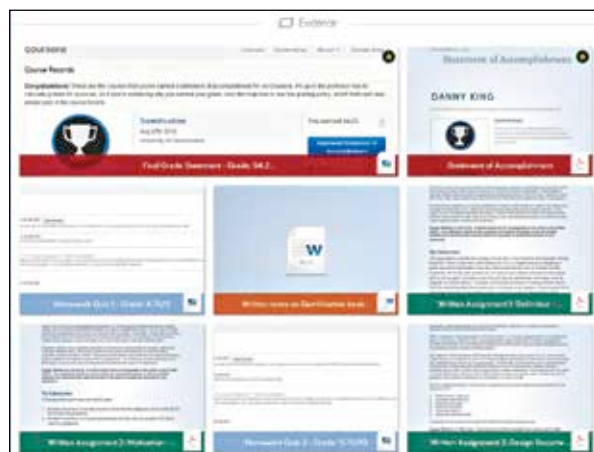
In this new age of job hunting, people are stepping away from traditional resumes and want to “share their stories” instead. That's exactly what Re.vu does by presenting work details in a visually eye-catching manner. It lets you build your own resume in the form of infographics, and stores it on a personalised URL that serves as your resume. Although it might seem like a personal landing page, Re.vu focuses more on the data than the layout. LinkedIn integration makes sure that it is regularly updated along with any changes in your LinkedIn profile. It has a very cool interface that lets you add graphics such as stats, skill proficiencies, quotes etc. with ease.

Bottom line: *For the new age resume that focuses on visual appeal to tell a story, it doesn't get better than Re.vu.*

Rezscore

(www.rezscore.com)

The resume is perhaps the most impor-



work. A portfolio where the candidate can upload documents/certificates would surely give him/her an edge over the others. But now with the rise of online learning and MOOCs, employers are now more focused on skillsets rather than diplomas/degrees. Accredible, therefore, not only lets you upload documents/certificates that detail out what you already know, but also keeps track of what you're in the process of learning. It has a neat arrangement where you can create “slates” that represents a course/skill and attached to it is the “evidence” that you have to submit to ascertain your completion of the



Exploit in DRAM

Reports have confirmed that a new hack discovered by researchers can exploit a weakness in DRAM <http://dgit.in/DRAMExploit>



The ZenBook UX305

The extremely thin 13.1 mm MacBook was cheekily trumped by the ASUS ZenBook UX305 which is just 12.3mm thick <http://dgit.in/ZenAndMac>

tant document when it comes to a job search. Unfortunately, most of the time we're in the dark about how good our resume really is. Professional advice costs a bomb, and peer opinion doesn't ever cut it for us, does it? Now how about a free website that actually reviews your resume and then grades it for you? That's exactly what Rezscore does. Based on recommendations of hiring managers, HR directors, job search experts, and certified resume writers, RezScore's algorithms read your resume and analyse it on more than a dozen metrics to determine a grade for your resume. On top of that, it tells you exactly which areas you did well in, and comes up with recommendations for improving upon your resume. Sure, the analysis isn't completely accurate for resumes of less traditional job roles – but for most job roles, it should do a decent job.



Bottom line: If you want a second opinion on your resume and don't want to pay a consultant for it, check Rezscore out. It's free, quick and might just give you a good suggestion or two.

Not surprisingly, there are a bunch of mobile apps that let you create resumes on your phone. For the new age employee, we list down our pick of mobile apps that let him/her get on with a job search on the go:

Resume Star (iOS)

(<http://dgit.in/ResumeStr>)

Resume Star lets you build professional looking CVs in a matter of minutes on your iOS device. Nothing very fancy, but it gives you what you need from an app – enter your basic information, select from templates, and you're done. You can now export the resume, and even print it directly if needed. What stands out about it though, is its payment system. Initially completely free, they

insist on the customer paying them “only when we've earned it” which basically refers to when you actually get a job with the resume you created using Resume Star.

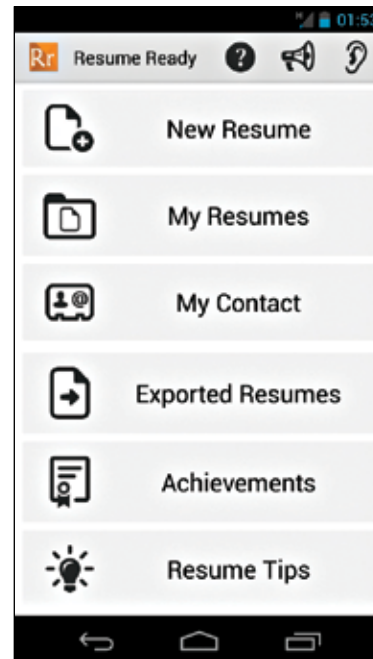
Bottom line: A complete solution for your resume making needs with a unique payment model. A must have.

Shine (iOS)

(<http://dgit.in/ShineiOS>)

Shine is perfect for making visually appealing resumes on the go. Similar to Re.vu, it lets you create stylish infographics to represent your portfolio. Just fill out the details in

five sections, and then select one of four layouts that are made available to you. These resumes, once complete, can be shared via E-mail or even sent directly to a printer. Moving between sections is very easy, and the whole interface is very snappy. Though there are only four layouts, they all look really good. The app has a very modern feel to it, and is clearly very suitable for certain job profiles, and not for some.



Bottom line: Easy to use, snappy interface, and visually appealing resumes make this a go-to option for anyone wanting to make new age resumes on the go.

Super Resume Builder (Android)

(<http://dgit.in/SupResume>)

Mumbai based Super Resume is slowly becoming a very popular resume making app for Android. Like the other resume builders on this list, you just need to fill in the details, select a template, and

your resume is ready. You can then share them instantly, or save it on your memory card. However, what is interesting is that they're trying to create a 'Tinder' like community for workspaces wherein prospective employees can choose which companies they'd like to work for, and vice versa. Thus, if you like a company, and the company likes your resume as well, there's a match and you're automatically connected.

Bottom line: Does its job as a resume builder. It's going to be interesting to see if the workspace 'Tinder' kicks off.

Resume Ready Lite (Android)

(<http://dgit.in/ResumeRdyLt>)

The free version of Resume Ready Pro is a no frills attached resume builder that might lack in features compared to its bigger (costlier) brother, but does its job as a resume builder. It has a very easy to understand interface that takes the user through the entire process. It also has a resume tips section that should help you while making your resume.

Bottom line: No-frills, basic functionality, and a good interface. The Lite version only lets you create 2 resumes though.

And that's about it. Use these tools wisely, and you will notice your next job hunt becoming that much easier.

Community

A Digit reader lists out ten websites and applications that you shouldn't miss out on

**WCGW?**

An astronaut sneaks a corned-beef sandwich into space. What could go wrong?
<http://digit.in/1N6axBp>

Ditzy Disney

Disney's been in and out of hot water for their apparent sexual innuendos in their films, but most of those have proven to be nothing more than our dirty minds playing tricks on us. That said, Disney has gone out of their way to load up their movies with easter eggs. Here are some of their best ones:

**Scarred for life**

In *Lion King*, Timon mentions that Scar, Simba's nemesis, would look good as a rug. Fast forward to *Hercules* and lo and behold, the mighty Scar is reborn and the Nemean Lion, to again be slain before he reaches old age and then take his place as Hercules's rug, which he proceeds to demonstrate by throwing it on the floor. Karma doesn't get worse than that.

Ladies and Tramps...

Lady and the Tramp were definitely very busy by the time 101 Dalmatians hit the theatres because what we assume are their offspring were caught roaming the streets of the city during the famed Twilight Bark scene. It's not just them, Jock, Peg and even Trusty put in a cameo as well. Now that's something.

**A grand entrance**

The Grand Duke from *Cinderella* puts in an appearance in *The Little Mermaid*. The more eagle-eyed of readers, and the slightly older generation we assume, would have spotted him in the background in the scene above. How many royal weddings has he been privy too? Especially ones with princesses who're not what they seem.

**Chinese maal**

Now the Chinese do have quite a reputation for creating nearly identical replicas of anything that will sell, but with *Tarzan*, they seem to have outdone themselves, digitally at least. The chinaware featured in the cartoon is straight from *Beauty and the Beast*. A lifeless replica no doubt, but a replica nonetheless. Will this never end? Where is the sense of propriety?

A Stitch in time...

Assuming that most of you are young 'uns, you might not be familiar with the disaster that was *Treasure Planet* but will be more familiar with *Lilo and Stitch*. But even a movie as disastrous as this, Disney managed to sneak in a cameo from the delectable *Stitch*, seen here hiding in the bookcase, pretending to be a toy of some sort.

**Ring a Belle?**

The Hunchback of Notre Dame was a decent enough movie in itself, but as with most Disney movies, a couple (or more) of Disney's other characters managed to sneak into the frames. Most notable is the presence of Belle (of *Beauty and the Beast* fame), who makes a brief appearance in one of the scenes alongwith, possibly, *Alladin's* carpet.



Back in action

Down for over 18 months, the Large Hadron Collider is now back in action. Here's the story <http://dgit.in/1HBUoTU>



Intelligent phases

Apparently, your intellect peaks in certain fields only at certain stages in your life <http://dgit.in/1HA3ux3>

How we unwind



Cricket World Cup

The World Cup matches continue and our incessant obsession with the sport continues as well. No amount of information is enough and having to juggle between work and home and cricket is getting to be a bit of a problem for some of the team. Still, this is cricket crazy India of course, this is to be expected.

House of cards

Kevin Spacey for president! Seriously, if we were U.S. citizens, we'd be more than happy to vote him in if for nothing else than to actually see him in the White House and giving speeches from the White House's chambers. Yes, we've been watching nothing else but House of Cards this month.



iPhones

There was a time, many years ago, when the arrival of the iPhone in our office would have caused quite a stir. But the arrival of the 6 and 6 Plus was a curiously uneventful affair. We were curious of course, particularly about the 6 Plus, but a few days of fiddling with the devices was all the time we needed with them.

digit DIARY

This month we doff our hats off to Todd. He may have been the crudest, crassest member of Scrubbs's team of "renegade" doctors, surgeons and nurses, and his incessant streams of innuendos kept us in rollicking spirits. What Todd did with such ease, we have tried desperately to emulate in our cover story (the story is a nod to that holiest of books, the Kamasutra, after all) and we aren't ashamed to say that we failed miserably at it.

Being innuendo virgins, it took us quite a while to firmly grasp the concept and our initial attempts to assimilate, and finally embrace the art was a slow and painful affair. It took a while before the concept nestled itself deep within our consciousness and planted the seed that spewed forth the words on the paper you see before you.

Frankly, the experience, while painful, was quite rewarding as it opened the floodgates of the mind to a thought-process that was entirely alien to us. Once in the zone, innuendoes gushed forth with a pent-up energy at the slightest provocation, haphazardly splattering all that was before us. It took us a while before we could tame that beast, to grab it with both hands and thrust it in the right direction, filling, we hope, an intellectual void that you prudishly pretend to conceal.

Our aim with the story was to help you achieve appgasm at a level that you've never experienced before in your life. We intended to set the tone for an event of a lifetime, to draw you

in gently, to direct the motion of your thoughts and gently ease you into the concept of the innuendo, caressing your mind with an intellect pulsating with the power of the imagination that mere words can trigger.

We wanted to tease your intellect, to enter deep within your consciousness and lead you to a climax so explosive and mind-blowing that you're left drained, gasping and clamouring for more; your nails digging into the back of the magazine as your intellect soaks up the words in the throes of ecstasy.

Sadly, given our inexperience, we're pretty sure that what we've ended up doing is simply grabbing what we could find and thrusting the innuendo in your face, making you draw back in surprise and gulp down the unexpected stream of words even before you have time to chew on them properly.

For that we do apologise most sincerely. This was a learning experience for us, as we hope it was for you.

While a team effort, the task itself was so taxing that by the end of the day, all we could really muster were a few sporadic spurts of inspiration that gave satisfaction to none and just sort of trickled off the edges and smeared the pages of the issue.

The story was fairly taxing to be sure, but it was also an enlightening and uplifting experience. We understand that this issue isn't for everyone and if it did rub you the wrong way, do drop us a mail at frothywalrus@digit.in



At the end
Comfort
Matters



MICE & KEYBOARDS

Your trusted IT partner



/prodotgroup



/ProDotGroup



/prodotgroup1

www.produtgroup.com



Pinky and the Brain

Check out this scientifically accurate but nightmare inducing version of the popular cartoon - Pinky and the Brain. http://dgit.in/P_Brain



More free apps

Amazon's "Unlocked" program aims to offer paid apps for free and also waive-off in-app purchases http://dgit.in/Apps_ForFree



Every month we highlight some aspiring tech writers and their spirited attempts to get published in the magazine. Let's have more!

10 websites and applications you must know about

Stuff that you always wanted to know about but were always too afraid to ask!



Praneet Sab

The internet is a vast place and you definitely can't explore every single website, at least not in one lifetime. When someone frankly tells you, "Go on the internet, do a Google search and everything will be in front of you!" you find that in reality, it's not that easy. A majority of the time, you won't find what you were exactly looking for and might end up on a website that doesn't

serve your purpose. It's rather difficult when you're looking for an answer to a technical question (don't even think about searching on Yahoo Answers!).

Apart from this, check your phone and count the number of apps that you don't use. Likewise, your computer may also be filled with many useless programs, extensions and applications. It's time to declutter your desktop and replenish them with things you might actually use. We've shortlisted ten such websites and apps that are the cream of the crop in their respective domains.

1 Learn how to code

Most people wish to learn coding but they fail or skip over it for the silliest reasons such as "I couldn't find any good source to start from". If you're one of those avid learners (or know someone who is), then visit 'Codecademy' (<http://www.codecademy.com/>). Once you go through the site, you'll surely love the simplicity of its chapters and the way they teach you coding. Try it once and you'll quit any professional course you might be taking. You may also consider 'Udemy' or 'Lynda' but they aren't as user-friendly as Codecademy.

2 For all your questions

At times, you find yourself asking unique questions that don't have an answer yet. If your question is related to programming, technology, maths, physics, chemistry or anything that's somehow related to studies then 'Stackoverflow' (<http://stackoverflow.com/>) is your destination. You may also consider 'Daniweb' for programming related questions. If you're simply curious about a topic or need an opinion, then head over to 'Quora' (<http://www.quora.com/>).

3

Learn how to hack

Ever have a wicked idea, but failed to accomplish it just because you couldn't find a great source to learn from or a community which could help you out? Whether it's about fake Likes on Facebook, website views, Black-hat SEO, free elite proxies, auto-bots or just about anything that isn't genuine, 'Blackhatworld' (<http://www.blackhatworld.com/>) is the best community for all such things. Just be cautious enough not to do anything illegal that could get you into trouble.

4

Explore the dark side of the internet

This is something most people would never see unless they used a specific browser for anonymity i.e. Tor browser. Deepweb was created with the intention of being a hidden anonymous place that hosts all kind of illegal stuff – not always possible with .com or similar top-level domains. Links to sites such as 'Silkroute', which is known to sell drugs, are listed on the hidden portal with other sites as well and since it's illegal we'd prefer not to tell you about the rest. Too bad eh?

5

Find a good proxy

There are websites that can provide you with free proxies, but the problem with them is that those proxies are generally not good enough. Moreover, you won't automatically get them in .txt format, which is required for their usage with other software. In such situations, you can either buy proxies or use 'Gather Proxy' to get 1,000 free proxies with different levels of anonymity, from transparent to elite! The software also checks whether the proxies can handle "https" links and gives you the ping time of each proxy. And of course, you can export all the proxies in a notepad. Get the software for free from its official website at <http://www.gatherproxy.com/proxychecker>.

6

Automate processes

Ever been in a situation where you were needed to do the same task again and again? With 'JitBit Macro Recorder', you can automate all your steps. You can easily program the macro recorder to identify patterns on the screen and then act accordingly. You can also use logical statements,



Mini-ITX based X99 board?

In an industry first, ASRock unveiled the first ever Mini-ITX motherboard for Intel's high-end X99 platform <http://dgit.in/2011onITX>



Boot speed test

See how Samsung's Galaxy S6/S6 Edge hold up along with Apple's iPhone 6 in a boot time speed test: <http://dgit.in/BootBoot>

Digit Squad

thus making it the smartest macro recorder out there. This program isn't free (but it doesn't cost much either) but you can get a trial version from <https://www.jitbit.com/macro-recorder/>

7 Tweak a website or two

As the name suggests, 'Firefox Developer Edition' is primarily aimed at developers and those who like to fiddle with websites and their normal functions. Although a normal browser can help you achieve the same, Firefox Developer Edition gives you tools to monitor a network, debug your app, Valence add-on, webIDE and lots more. Another special feature is that it's a 64-bit browser, thus allowing you to use more RAM as compared to 32-bit builds. You can download it from the official site at <http://dgit.in/FireFoxDev>

8 Edit videos

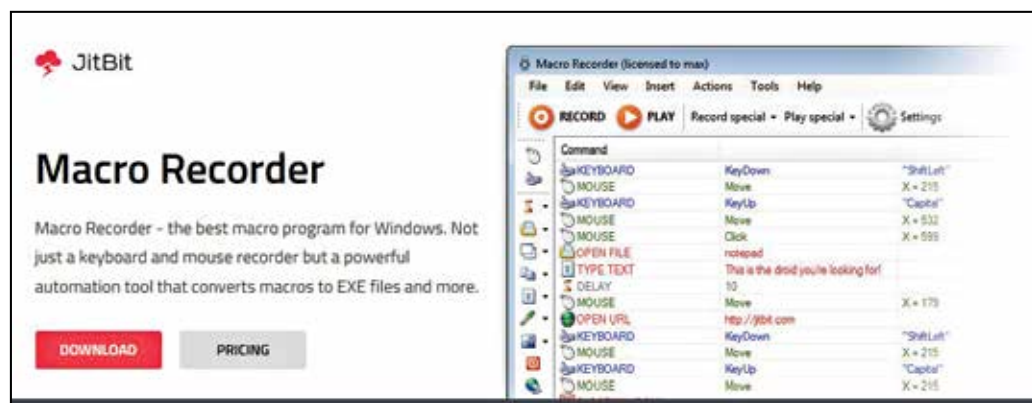
While there are many software available for video editing, nothing beats the user-friendliness of Camtasia Studio. Camtasia comes bundled with some powerful features and can do what any other big software can do, while boasting of a simple and friendly UI. It's great for those who create videos by recording their screens and includes features like pan & zoom and easy-to-use audio controls that trump other software's audio control. Moreover, you can easily share your content directly on YouTube or any other site on which you'd like to upload it. Get it from <http://dgit.in/CamtasiaSt>

9 Capture screenshots

'FastStone Capture' is the best software for capturing screenshots. It's light-weight, easy to use and has an in-built image editor. In fact not just screenshots, you can even record your screen which it does perfectly. Some of us have been using it since we began using computers and till date it has been surpassing our expectations. FastStone Capture comes with a 30-day trial period, after which you can buy it without breaking the bank. Download it from <http://dgit.in/FastStoneCap>

10 Mint money with your skills

You've got the skills to make money, but what about the clients? To find them, you'll need to advertise your services, establish a proper team or company and complete other formalities. But when you have freelancer.com, you don't even need to leave your couch, let alone step out of your house. All you need is an internet connection and some great skills, and freelancer will bring clients from around the globe to your desktop. The site is chock-full of new companies looking for people who can make websites, code mobile applications



With Macro Recorder automation has never been this easy

and other such things. You may also consider 99designs.com if you're more into designing rather than coding.

So that completes the list of the ten software and websites that you must know about. There are also a bunch of other resources and websites worth mentioning that you might already know about. They are IDM (Internet Download Manager), XAMPP, www.torrent-invites.com, www.postimage.org, www.tomshardware.com and www.wordle.net.

NP AV

PC, Laptop Tablet, Mobile

सुरक्षा



92.72.70.70.50
98.22.88.25.62

india antivirus

com

CCTV CAMERA AND DVR

COMPLETE SECURITY SOLUTION

QDIS-6AD2331
DOME CAMERA



QDIS-6AT2331
BULLET CAMERA



QDIS-8AD2338
DOME CAMERA



QDIS-8AT2338
BULLET CAMERA



QDIS-11AD2337
DOME CAMERA



QDIS-11AT2337
BULLET CAMERA



QDIS-1MD3331
DOME CAMERA



QDIS-1MT3331
BULLET CAMERA



QHM-TC48L3
BULLET CAMERA



QHM-DC60L3
DOME CAMERA



QHM-TC60L3
BULLET CAMERA



QHM-DC90L3
DOME CAMERA



QHM-TC90L3
BULLET CAMERA



QHM-TC90A1
BULLET CAMERA



QHM-TC90A2
BULLET CAMERA



QHM-DY90PL3
DOME CAMERA



QHM-TY90PL3
BULLET CAMERA



QHM-DY70L3
DOME CAMERA



QHM-TY70L3
BULLET CAMERA



QHM-TY70L5
BULLET CAMERA



QHM-DY70A1
DOME CAMERA



QHM-TY70A1
BULLET CAMERA



QHM-TY70A2
BULLET CAMERA



CCTV CABLE
-3+1/RG-59/RG-6



QHMP CAT 5E/CAT6
NETWORKING CABLE



QHM4101-S7AHDF
4 Channel AHD DVR



QHM4101-82DF
4 Channel AHD DVR



QHM8101-S7AHDF
8 Channel AHD DVR



QHM8101-82F
8 Channel AHD DVR



QHM-1604F
16 Channel DVR



3 QHMP products are now bought every second in India*
Pionner in IT Peripherals for last 20 years

For enquiry mail us at info@qhmp.com

Quantum Hi-Tech Merchandising Pvt. Ltd. is the IT arm of India based QHMP Group.

Quantum Hi Tech Merchandising Private Limited
C-205, Naraina Industrial Area, Phase-I, New Delhi- 110028, India.
Tel: +91 11 25700291-95, Fax: +91 11 42644350

All logos and trade marks on the products are the registered trade marks of their respective companies.
The Product specification may change from time to time without any prior notice.
The picture of the product shown in this advertisement may vary with the actual product.
QHMP reserves all rights regarding the product and its specifications.
*Condition Apply

ASUS[®]
IN SEARCH OF INCREDIBLE

ASUS recommends Windows.



**THE CHOICE OF
CHAMPIONS**

« G551

G751 »

X550JK ▼



ASUS X550JK winner of
best Gaming Laptop award - Digit Zero 1

ASUS GAMING SERIES

EXPERIENCE POWER FROM WITHIN

THE ULTIMATE FIGHTING MACHINE

Ultimate Gaming Power | Intelligent Cooling System | Specially-designed game keys

Price range starts from ₹69,999

Learn, work, play and connect with Intel Inside[®]



© 2014 Ubisoft Entertainment. All Rights Reserved. Assassin's Creed, Ubisoft and the Ubisoft logo are trademarks of Ubisoft Entertainment in the U.S. and/or other countries. OEM bundle license by Software Symbolix Pte Ltd.



Join us on facebook.com/ASUSIndia • www.asus.com/in • Toll free No. 1800-2090-365

Trademarks: Ultrabook, Celeron, Celeron Inside, Core Inside, Intel, Intel Logo, Intel Atom, Intel Atom Inside, Intel Core, Intel Inside, Intel Inside Logo, Intel vPro, Itanium, Itanium Inside, Pentium, Pentium Inside, vPro Inside, Xeon, Xeon Phi, and Xeon Inside are trademarks of Intel Corporation in the U.S. and/or other countries. The prices, specification and availability of products is subject to change without prior notice. Products may not be available in all markets. Products & accessories shown are for representation purpose only; actual products/accessories may vary. ASUS India is not responsible for any typing errors in specifications. Brand and product names mentioned are trademarks of their respective companies. Prices and specifications are subject to change with ASUS Discretion.

BELIEVE IT OR NOT

A COLOUR PRINTOUT CHEAPER THAN A CUP OF TEA*



**Canon ranked third in the world for
receiving patents awarded by the U.S.
Patent and Trademark Office in 2013****

Rapid Fusing Technology decreases electricity cost
pQ toner for superior printing quality



imageRUNNER ADVANCE Series

*Cup of Tea here is assumed to be priced at INR 8.00
**Based on weekly patent counts issued by the United States Patent and Trademark Office

AVAIL A FREE DEMONSTRATION AT YOUR OFFICE

Call Canon: 1800 208 3366 / 1800 180 3366. **SMS 'COLOUR' to 56070**

Corporate Office: Canon India Pvt. Ltd., 7th floor, Tower B, DLF Epitome, DLF Phase-III,
Gurgaon-122002. Ph: 0124-4160000